National Library of Canada
Bibliothèque nationale du Canada

Canadian Theses Service
Services des thèses canadiennes

Ottawa, Canada
K1A 0N4

CANADIAN THESES

THÈSES CANADIENNES

NOTICE

The quality of this microfiche is heavily dependent upon the quality of the original thesis submitted for microfilming. Every effort has been made to ensure the highest quality of reproduction possible.

If pages are missing, contact the university which granted the degree.

Some pages may have indistinct print especially if the original pages were typed with a poor typewriter ribbon or if the university sent us an inferior photocopy.

Previously copyrighted materials (journal articles, published tests, etc.) are not filmed.

Reproduction in full or in part of this film is governed by the Canadian Copyright Act, R.S.C. 1970, c. C-30. Please read the authorization forms which accompany this thesis.

AVIS

La qualité de cette microfiche dépend grandement de la qualité de la thèse soumise au microfilmage. Nous avons tout fait pour assurer une qualité supérieure de reproduction.

S'il manque des pages, veuillez communiquer avec l'université qui a conféré le grade.

La qualité d'impression de certaines pages peut laisser à désirer, surtout si les pages originales ont été dactylographiées à l'aide d'un ruban usé ou si l'université nous a fait parvenir une photocopie de qualité inférieure.

Les documents qui font déjà l'objet d'un droit d'auteur (articles de revue, examens publiés, etc.) ne sont pas microfilmés.

La reproduction, même partielle, de ce microfilm est soumise à la Loi canadienne sur le droit d'auteur, SRC 1970, c. C-30. Veuillez prendre connaissance des formules d'autorisation qui accompagnent cette thèse.

THIS DISSERTATION
HAS BEEN MICROFILMED
EXACTLY AS RECEIVED

LA THÈSE A ÉTÉ
MICROFILMÉE TELLE QUE
NOUS L'AVONS REÇUE

NL 339 (r. 86/01)

Canada

329

0-315-27060-8

National Library of Canada
Bibliothèque nationale du Canada

Canadian Theses Division
Division des thèses canadiennes

Ottawa, Canada
K1A 0N4

PERMISSION TO MICROFILM — AUTORISATION DE MICROFILMER

• Please print or type — Écrire en lettres moulées ou dactylographier

Full Name of Author — Nom complet de l'auteur

MARGARET ANNE MAHONEY

Date of Birth — Date de naissance	Country of Birth — Lieu de naissance
JAN. 8, 1957	CANADA

Permanent Address — Résidence fixe

95 INGLEWOOD DR.
TORONTO, ONTARIO
M4T 1H4

Title of Thesis — Titre de la thèse

ADOLESCENT SUICIDE AND PARASUICIDE:
~~A~~ THEORETICAL MODELS FOR RESEARCH

University — Université

UNIVERSITY OF ALBERTA

Degree for which thesis was presented — Grade pour lequel cette thèse fut présentée

M.Ed.

Year this degree conferred — Année d'obtention de ce grade	Name of Supervisor — Nom du directeur de thèse
1983	DR. JOHN G. PATERSON

Permission is hereby granted to the NATIONAL LIBRARY OF CANADA to microfilm this thesis and to lend or sell copies of the film.

The author reserves other publication rights, and neither the thesis nor extensive extracts from it may be printed or otherwise reproduced without the author's written permission.

L'autorisation est, par la présente, accordée à la BIBLIOTHÈQUE NATIONALE DU CANADA de microfilmer cette thèse et de prêter ou de vendre des exemplaires du film.

L'auteur se réserve les autres droits de publication; ni la thèse ni de longs extraits de celle-ci ne doivent être imprimés ou autrement reproduits sans l'autorisation écrite de l'auteur.

Date	Signature
JUNE 28, 1983	Margaret A. Mahoney

NL-91 (4/77)

THE UNIVERSITY OF ALBERTA

ADOLESCENT SUICIDE AND PARASUICIDE: THEORETICAL MODELS FOR RESEARCH

by

© MARGARET ANNE MAHONEY

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE

OF MASTER OF EDUCATION

IN

COUNSELING PSYCHOLOGY

EDUCATIONAL PSYCHOLOGY

EDMONTON, ALBERTA

FALL, 1983

THE UNIVERSITY OF ALBERTA

RELEASE FORM

NAME OF AUTHOR MARGARET ANNE MAHONEY

TITLE OF THESIS ADOLESCENT SUICIDE AND PARASUICIDE: THEORETICAL MODELS FOR RESEARCH

DEGREE FOR WHICH THESIS WAS PRESENTED MASTER OF EDUCATION

YEAR THIS DEGREE GRANTED FALL, 1983

Permission is hereby granted to THE UNIVERSITY OF ALBERTA LIBRARY to reproduce single copies of this thesis and to lend or sell such copies for private, scholarly or scientific research purposes only.

The author reserves other publication rights, and neither the thesis nor extensive extracts from it may be printed or otherwise reproduced without the author's written permission.

(SIGNED) Margaret A. Mahoney

PERMANENT ADDRESS:

95 Inglewood Dr.
Toronto Ontario
M4T 1H4

DATED June 28 1983

THE UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled ADOLESCENT SUICIDE AND PARASUICIDE: THEORETICAL MODELS FOR RESEARCH submitted by MARGARET ANNE MAHONEY in partial fulfilment of the requirements for the degree of MASTER OF EDUCATION in COUNSELING PSYCHOLOGY.

.....

Supervisor

.....

.....

Date June, 1983

To Deb and Kris

ABSTRACT

The rates of adolescent suicide in Alberta have dramatically increased since 1951 (Hellon and Solomon, 1980), and it is estimated that the rates of adolescent parasuicide have at least parallelled this increase (Weissman, 1974). While significant differences between these two phenomenon have been identified (Petzel and Cline, 1978), such differences have remained unexplained. The present investigation began as an exploratory endeavor to identify and describe the differences between adolescent suicide and parasuicide. To achieve this end, the statistics, conventional approaches and the relevant literature investigating adolescent suicide and parasuicide were considered.

The author first reviewed the relevant statistics which described the differences in trends between these two behaviors. Adolescent suicide was observed to be primarily a male phenomenon and extremely lethal methods were characteristically used in conjunction with the suicidal act. In comparison, adolescent parasuicide was observed to be primarily a female phenomenon and less lethal means were characteristically utilized.

The principal psychological and sociological theories of suicide were summarized and evaluated. However, it was concluded that neither of these approaches, in their sole application, account for or differentiate between adolescent suicide and parasuicide.

Upon reviewing the literature investigating the psychosocial precipitants to adolescent suicide and parasuicide, the principal factors which have been reported to facilitate such behaviors were identified. It was also observed that in addition to sex, the intentions and the adolescent's perceptions of the situation differentiated parasuicidal from suicidal youths.

These factors were organized into a preliminary formulation of the suicidal and parasuicidal processes. A theoretical model was constructed to illustrate the proposed processes and to describe the subsequent differences between suicidal and parasuicidal adolescents.

ACKNOWLEDGEMENTS

I would first like to give sincere thanks to the chairman of my committee, Dr. John G. Paterson, not only for his encouragement, support and guidance throughout this project, but for his sincere interest in my professional growth throughout my M.Ed. program.

I would also like to thank the other members of my committee, Dr. John J. Mitchell and Dr. George K. Jarvis, for their helpful suggestions, support and guidance.

I would like to thank Joanne Pagnucco for her conscientious work in typing this thesis and her friendship.

Sincere thanks to my friends who have supported me and shared with me the ups and downs of my M.Ed. program, especially Debbie, Bonnie Jean, Gretchin, Allison, Karen, Bruce, Doug, Udaya and Irvin - you are all very special people.

A special thanks to my office-mate Gabe for his friendship, help and for creating an extremely comfortable working environment.

I would lastly like to thank my family, for you are an integral part of everything I do.

Table of Contents

Chapter — Page

I. INTRODUCTION 1

A. Defining The Terms 5

Suicide 5

Parasuicide 6

B. Problems In The Literature 7

II. STATISTICS AND STATISTICAL TRENDS OF ADOLESCENT SUICIDE AND PARASUICIDE IN ALBERTA 10

Adolescent Suicide In Alberta 10

Parasuicide In Alberta 21

Summary And Discussion Of The Statistical Differences Between Adolescent Suicide and Parasuicide 25

III. PSYCHOLOGICAL APPROACHES TO ADOLESCENT SUICIDE AND PARASUICIDE 28

A. A Summary And Discussion Of The Freudian Approach To Suicide 31

B. A Summary And Discussion Of The Adlerian Approach To Suicide 37

C. A Summary And Discussion Of The Sullivanian Approach To Suicide 41

D. A Summary And Discussion Of The Eriksonian Approach To Suicide 46

E. Discussion And Evaluation Of The Psychological Approaches To Adolescent Suicide And Parasuicide 53

IV. SOCIOLOGICAL APPROACHES TO ADOLESCENT SUICIDE AND PARASUICIDE 58

A. Sociological Theories of Suicide 58

B. An Evaluation Of The Sociological Approach To Suicide 62

V. PSYCHO-SOCIAL APPROACHES TO ADOLESCENT SUICIDE AND PARASUICIDE 64

A. Adolescent Suicide 64

B. Adolescent Parasuicide 72

C. Factors Which Differentiate Suicidal And Parasuicidal Adolescents 74

VI. Theoretical Models For Research 78

A. Adolescent Suicidal and Parasuicidal Processes .78

B. Therapeutic Implications Of The Model 88

Intervention Strategies 90

C. Summary And Conclusions 92

Recommendations For Future Research 95

List of Tables

Table		Page
II.1	Suicide Rates (Per 100,000) By Age: 1976 - 1981, Alberta	14
II.2	Suicide Rates (Per 100,000) For The 10 - 14 and 15 - 19 Age Groups, By Sex: 1976 - 1981, Alberta	15
II.3	Summary Of The Numbers And Percentages Of Suicides For Youths (Under 20) And Adults (20 And Over) By Sex: 1976 - 1982, Alberta	17
II.4	Percentages Of The Methods Used In Suicide For Youths (Under 20) And Adults (20 And Over) By Sex; 1976 - 1982, Alberta	19
II.5	Summary Of The Four Most Predominant Methods Used In Suicide (Percentages) For Youths (Under 20) And Adults (20 And Over): 1976 - 1982, Alberta	20

List of Figures

Figure Page

VI.1 Theoretical Model of the Adolescent Suicidal and Parasuicidal Processes.....79

I. INTRODUCTION

A primary objective of the development of any culture is to enhance the quality of life for its future generations. The offspring of the present generation are valued to the extent that their education, health and psychological well-being have become the responsibility of the total society. Implicit in this investment is the hope that such youths will become productive members of society and build upon the accomplishments of their parents' generation. Thus, the death of a youth in our culture is viewed as a social misfortune. When the death is the result of an unnecessary event, it is viewed as a social tragedy. However, when a youth intentionally takes his own life, it is difficult for society to focus upon the event, as it may determine that the social community has neglected a primary responsibility. Thus, the problem of adolescent suicide has received little recognition. Until recently, adults--including parents, teachers and professionals--have considered the suicidal adolescent to be looking for attention or to be mentally ill. However, the increasing rate of suicide has necessitated that professionals begin to examine this trend as a significant problem in our present society (Hellon and Solomon, 1980).

In Alberta, adolescent self-destructive behavior is rapidly becoming a major health problem (Solomon and Boldt, 1976). Adolescent suicide is currently the second leading cause of death for this age group, exceeded only by

accidents (Office of the Chief Medical Examiner, 1983). As reported by Charles Hellon and Mark Solomon (1980), the rate of suicide for youths has consistently increased since 1951 at a greater pace than for any other age group (Hellon and Solomon, 1980). In addition to age, there exists a prominent sex difference within this increase in suicide rates in Alberta. For male youths, the increase has been significantly greater than for females (Hellon and Soloman, 1980). This trend has widened the previously significant gap between the male and female suicide rates for young adults.

For the purpose of this thesis, the term *parasuicide* has been incorporated to describe non-lethal self-destructive behavior, when the specific intention of such behavior has not been identified. This functional deviation in terminology is subsequently discussed within the section of this chapter dealing with definitions of terms.

Although the occurrence of parasuicide is not recorded in Alberta, statistics from other geographical areas suggest dramatic increases in the rates of adolescent parasuicide. In the United States, it is estimated that the rates of parasuicide across all ages increases by approximately 160 percent per year (Weissman, 1974). In addition, it has been suggested that the rates of parasuicide for females and youths are significantly greater than for the total population (Jarvis *et al*, 1976). For adolescents, a radical sex difference has consistently been observed within the

rates of parasuicide. For this age group, it has been estimated that ninety percent of the parasuicidal individuals are female (Balsen and Masterson, 1959; Hawton *et al*, 1982).

In view of the fact that the majority of adolescents who complete suicide are male, this radical sex difference in the occurrence of adolescent parasuicide is of major interest. Such findings suggest that significant sex related differences may exist between the precipitating factors and psychological processes associated with these two phenomena. The identification of such differences is of extreme importance in the development of effective intervention, prevention and postvention strategies in the treatment of adolescent suicide and parasuicide. However, although such sex and age differences have previously been identified, they remain unexplained.

The purpose of this thesis is to describe the sex and age related differences in the occurrence of suicide and parasuicide for adolescents in Alberta. The author first describes and discusses the state of adolescent suicide and parasuicide in Alberta. Secondly, the literature and the relationship of the literature to common psychological and sociological theories is reviewed with reference to adolescent suicide and parasuicide. Finally, the author proposes a theoretical model which illustrates the differences between the precipitating factors and psychological processes associated with adolescent suicide

and parasuicide. To achieve this end, this thesis has been organized into five additional chapters.

The first chapter consists of a review of the statistics and statistical trends of adolescent suicide and parasuicide. The purpose of this presentation is to describe and isolate the problem under investigation. Thus, the differences between adolescent suicide and adult suicide have been considered in addition to the differences between adolescent suicide and parasuicide.

The second chapter consists of a review of the major psychological theories of suicide. This chapter has been divided into five sections. Within the first four sections, the author reviews the psychological theories of suicide proposed by Freud, Adler, Sullivan and Erikson, respectively. These four dynamic personality theorists were selected by the author as such theories are the principal foundations of the present approaches utilized in the treatment and the investigation of the psychological processes associated with suicide and parasuicide. This chapter concludes with an evaluation of the psychological approaches to the occurrence of adolescent suicide and parasuicide.

The third chapter consists of a review of the sociological perspective of suicide in relation to adolescent suicide and parasuicide . The author has selected the theory proposed by Durkheim to represent the sociological approach. This chapter concludes with an

evaluation and discussion of Durkheim's theory in relation to adolescent suicide and parasuicide.

The fourth chapter consists of a review of the relevant literature examining the psycho-social factors which have been associated with adolescent suicide and parasuicide. The focus of this chapter is to evaluate and isolate the factors which may differentiate these two phenomena in Alberta.

The final chapter has been divided into three sections. The first section focuses upon the development of a theoretical model which illustrates the differences observed between the psycho-social processes involved with adolescent suicide and parasuicide. The second section of this chapter is a discussion of the therapeutic implications of the proposed model. This chapter concludes with a summary of suggestions for further research in the investigation of adolescent suicide and parasuicide.

A. Defining The Terms

Suicide

In the study of suicide, a clear definition of terms is essential. However, researchers have encountered problems in their efforts to develop such a definition. The main issue which has raised controversy amongst investigators is the issue of intent. Durkheim (1952) proposed the following definition for suicide:

All cases of death resulting directly or indirectly

> from a positive or negative act of the victim himself which he knows will produce this result. (p. 44).

This definition of suicide has been criticized because of its general ambiguity and unclear reference to the issue of intent (Gibbs, 1968). As pointed out by Gibbs, Durkheim does not establish to what level of consciousness the term *knows* refers. However, suicides in Alberta are recorded as such, only after the establishment of a clear and conscious intent, through the mode used in the performance of the act or through a "psychological autopsy" (Office of the Chief Medical Examiner, 1983). Thus, for the purpose of this thesis, the definition proposed by Erwin Stengel (1964) will be incorporated:

> Suicide means the fatal act of self injury undertaken with conscious self destructive intent, however vague and ambiguous, (p. 12).

Parasuicide

In the literature investigating suicidal behavior, many terms have been associated with self-inflicted injury. These terms include: self mutilation, self harm, suicide gestures, attempted suicide and parasuicide.

In view of the definition of suicide, the term *attempted suicide* implies the intent of self destruction. However, as will be illustrated, a significant proportion of adolescents who inflict self harm have no such intention. In

opposition to attempted suicide, the terms *self mutilation*, *self injury* and *suicidal gestures* imply the intent to harm oneself, but not the intention of self destruction. However, as will be illustrated, a significant proportion of adolescents who inflict self injury may have this intention. In view of this confusion of terminology, the author proposes the following functional definitions of the terms *attempted suicide*, *self injury* and *parasuicide*.

Attempted Suicide means the non-fatal act of self injury with conscious self destructive intent, however vague and ambiguous (Stengel, 1964).

Self Injury (self mutilation, suicidal gestures) means the non-fatal act of self injury with the conscious intent of self harm.

Parasuicide means the non-fatal act of self injury with conscious intent, when the specific intent of the act has not been established.

B. Problems In The Literature

The theoretical perspective of this thesis has been developed from the existent body of literature investigating adolescent suicide and parasuicide. Before considering such literature, it is necessary to consider the methodological problems inherent within this investigation. The following discussion is a summary of the principal methodological problems in the study of adolescent suicide and parasuicide.

As earlier stated, the investigation of adolescent suicide and parasuicide is a relatively new area of research. As suicide is regarded as a *taboo* topic by society, researchers have had to confront major problems in their investigations.

As illustrated, the definitions of suicide, attempted suicide, self harm and parasuicide are unclear and extremely confounded. Despite this observation, authors tend to use these terms interchangeably without defining what precisely is the population under study (examples include: Murphy *et al*, 1982; Preffer, 1981; Simpson and Porter, 1981; Wenz, 1979a, 1979b).

Sampling is a consistent problem in the investigation of adolescent parasuicide. Researchers have had to utilize samples of hospitalized adolescents or adolescents who have been institutionalized for a variety of idiosyncratic problems. However, such samples may not be representative of all parasuidal adolescents. In the study of institutionalized adolescents, the results may be further confounded by the lack of a clear differentiation between suicidal tendencies and other psychological disturbances. Thus, the generalizability of the results from such samples may be extremely questionable.

In the study of adolescent suicide, such samples are also utilized without the establishment of a clear suicidal intent. However, due to the differences identifiable between suicidal and parasuicidal youths, the results of such

investigations may not be generalizable to either population. When one excludes the studies with such methodological problems from the literature, what remains is extremely limited.

In the investigation of completed suicides, the stigma attached to the topic has made the acquisition of records such as case histories extremely difficult. In addition, interviews with parents after the death of their child is considered an insensitive undertaking while, within a later interview, the information obtained may be distorted or incorrect. Thus, the literature investigating completed suicides is also plagued with serious limitations.

Obtaining samples for comparison purposes has been an even greater obstacle for researchers. Jacobs (1971) reports that due to the *taboo* associated with studying adolescent suicide, he had to wait nearly one year to obtain a comparative norm sample. Because of this problem, most studies are void of comparative norm samples and estimates of population parameters are sometimes but rarely used. Thus the reliability and validity of the results of such studies are extremely questionable. Keeping such limitations of the literature in mind, the statistics and statistical trends of adolescent suicide and parasuicide are subsequently reviewed.

II. STATISTICS AND STATISTICAL TRENDS OF ADOLESCENT SUICIDE AND PARASUICIDE IN ALBERTA

In order to identify the different trends between suicidal and parasuicidal behavior, the author has chosen to describe the statistical trends of these two phenomenon separately. First, the statistics of adolescent suicide in Alberta are reviewed, followed by the statistical trends of adolescent parasuicide. This chapter concludes with a discussion of the differences between adolescent suicide and parasuicide.

Adolescent Suicide In Alberta

To accurately estimate the rates and trends of adolescent suicide in Alberta, valid and reliable information must be available. However, according to Menno Boldt in *The Report of the Task Force on Suicide (1976)*:

> The data being collected relative to suicide is not useful; it is not valid, not reliable, nor generally pertinent to the concerns of suicide prevention, intervention and postvention, (p. 29).

According to Boldt, these major difficulties stem from the following factors. Firstly, the information contained in the official files are primarily police and medical records. These records are characteristically incomplete, inconsistent and lack uniformity. Thus, there are few variables for which comparable data are available.

A second consideration is the under-reporting of suicide. This is primarily due to the religious *taboos* and

the lack of consistency in the investigative procedures and criteria used for certification. Due to the stigma attached to suicide by religious circles and society in general, there are pressures on police, physicians and the victim himself, to conceal the true cause of death. In the case of adolescent suicide, the pressure is even greater in an effort to *protect the name* and *spare* the bereaved family members. Thus, in such cases, a death may only be attributed to suicide in the face of unequivocal evidence.

Certifying officials differ in the criterion they use in attributing a death to suicide: "Some go as far as demanding a suicide note while others will be satisfied with reasonable circumstantial evidence" (Boldt, 1976, p. 32). In addition, when the cause of death cannot be easily determined, the case rarely receives a thorough investigation (Boldt, 1976).

Since the publication of *The Task Force Report*, Alberta has employed Medical Examiners to replace the coroners system in an effort to improve the quality of the data collected (Office of the Chief Medical Examiner, 1983). However, the validity and reliability of the presently collected data has not yet been evaluated. In light of these problems, Solomon and Boldt (1976) suggest that approximately one-half of all suicides are reported as such.

Adolescent Suicide Rates And Trends

In 1980, Alberta had a higher suicide rate than any other province in Canada. In 1982, the suicide rate of

Alberta placed third in Canada, behind the provinces of Saskatchewan and Quebec (Office of the Medical Examiner, 1983). Charles Hellon and Mark Solomon (1980), in their study of the suicide trends in Alberta, spanning the period of 1951 through 1977, have described the increase in the suicide rates. Their results illustrated that, although the suicide rates for the older age groups fluctuated slightly or declined, the suicide rates for the younger age groups have steadily increased (Hellon and Solomon, 1980). For youths in the fifteen to nineteen year age group, the 1976 rate of 20.0 per 100,000 was 12.5 times the rate of 1.6/100,000 in 1951 (Hellon and Solomon, 1980).

When sex differences were examined, the increase in the rate of suicide for males in the fifteen to nineteen year age group was significantly greater than that for females and larger than for any other age group. In 1951, the rate for males in this age group was 3.4/100,000. By 1976, this rate had increased by more than nine times to 31.4/100,000. For females in this age group, the rate increased by a factor of 5.3, from 1.5/100,000 to 7.9/100,000 (Hellon and Solomon, 1980).

Unfortunately, Hellon and Solomon (1980) did not consider the younger age groupings. Thus the comparable data for the complete adolescent age span are not readily available. It should also be noted that the rates of suicide for adolescents, as an age group, have not been consistently documented in Alberta. Instead, the rates as given by the

Chief Medical Examiner's Office are calculated for ten year age spans and are presented in Table 1 (Office of the Chief Medical Examiner, 1983).

The rates for the ten to nineteen year age group are extremely misleading, as few youths younger than fifteen years of age commit suicide. For this reason, the author has taken the initiative of calculating the rates for the ten to fourteen year and fifteen to nineteen year age groups for both sexes, for the years 1976 to 1981. In calculating these rates, the official numbers of suicides for these age groups were obtained from the Office of the Chief Medical Examiner (1983). The provincial population estimates were obtained from Statistics Canada (1982). It should be noted that these are the same population estimates used in the calculation of the official rates. These calculated rates are presented in Table 2.

As can be seen in Table 2, the rates for suicides for youths in the ten to fourteen year age group are comparatively small, fluctuating from 5.0/100,000 in 1978, to 1.1/100,000 in 1979. For the fifteen to nineteen year age group the rates are considerably greater. When sex is considered, the results are striking. In 1977, the rate for males in the fifteen to nineteen year age group was 40.9/100,000, while for females the rate was 9.0/100,000. Throughout this year span, the rates for males are considerably larger than those for females.

TABLE 1
SUICIDE RATES (PER 100,000) BY AGE: 1976 - 1981, ALBERTA

AGE	1976	1977	1978	1979	1980	1981
10 - 19	10.5	15.4	10.4	11.4	12.9	12.2
20 - 29	28.1	25.1	23.2	22.7	25.5	16.7
30 - 39	23.9	18.6	23.2	16.0	25.4	19.7
40 - 49	22.9	27.1	26.7	22.5	20.1	25.8
50 - 59	23.0	32.1	25.9	24.7	23.5	25.6
60 - 69	25.4	20.7	18.0	14.3	(60+) 28.9	(60+) 20.6
80 - 89	1.6	2.2	1.8	1.3		
80 +	1.4	2.1	3.1	0.0		

TABLE 2

SUICIDE RATES (PER 100,000) FOR THE 10 - 14 AND 15 - 19 AGE GROUPS, BY SEX: 1976 - 1981, ALBERTA

AGE	SEX	1976		1977		1978		1979		1980		1981	
		NO.	RATE	NO.	RATE	NO.	RATE	NO.	RATE	NO.	RATE	NO.	RATE
10 - 14	MALE	3	3.1	5	5.3	7	7.6	1	1.1	2	2.2	5	5.4
	FEMALE	1	1.1	1	1.1	2	2.3	1	1.2	2	2.3	0	0.0
	TOTAL	4	2.1	6	3.2	9	5.0	2	1.1	4	2.3	5	2.9
15 - 19	MALE	28	28.3	43	40.9	28	25.6	35	31.3	36	32.3	34	35.6
	FEMALE	8	8.5	9	9.0	4	3.8	8	7.4	9	8.4	5	4.7
	TOTAL	36	18.6	52	28.2	32	14.9	43	19.8	45	20.6	44	20.5

Over the years spanning 1976 to 1982 (inclusive), there were 2,466 reported suicides in the province of Alberta (Office of the Chief Medical Examiner, 1983). Of these 321 or 13% were youths under the age of 20. However, when sex is considered, it is observed that the male youths accounted for 16% of the total male suicides, while female youths accounted for 10% of the total number of female suicides in this province (see Table 3).

As presented in Table 3, of the 2,145 adult suicides, 76.9% were male while 23.1% were female. However, of the 321 youth suicides, 83.5% were male while 16.5% were female. Such a drastic and consistent sex difference suggests that adolescent suicide in Alberta is primarily a male phenomenon. In addition, this sex difference is more pronounced during adolescence than across the older age groups.

Methods Used in Suicide

The statistics for the methods used in suicide were obtained for the total number of completed suicides in Alberta for the years spanning 1976 to 1982. In addition, the statistics for the methods used in adolescent suicide were obtained separately for this same year span (Office of the Chief Medical Examiner, 1983). In order to compare males with females, and adolescents with adults, the percentages of the different methods used were calculated considering these two variables (see Table 4).

TABLE 3
SUMMARY OF THE NUMBERS AND PERCENTAGES OF SUICIDES
FOR YOUTHS (UNDER 20) AND ADULTS (20 AND OVER) BY SEX: 1976 - 1982, ALBERTA

	YOUTHS			ADULTS			TOTAL	
SEX	NO.	%	% TOTAL	NO.	%	% TOTAL	NO.	%
MALE	268	83.5	16	1649	76.9	84	1917	77.7
FEMALE	53	16.5	10	496	23.1	90	549	22.2
TOTAL	321	100.0	13	2145	100.0	87	2466	100.0

As presented in Table 4, firearms was the most predominant mode used by adolescents (53.9%) followed by hanging (19.0%), carbon monoxide poisoning (11.2%) and drug overdose (9.6%). While for adults firearms was again the predominant mode used, (36.7%), this method was followed by carbon monoxide poisoning (21.1%), drug overdose (17.9%) and hanging (15.0%).

The finding that carbon monoxide poisoning ranked third for adolescents (11.2%), and second for adults (21.1%), is not surprising due to the increased accessibility of this method with age. It is surprising, however, to find that firearms were used in the majority of adolescent suicides (53%). This finding raises serious questions around the accessibility of firearms in this province. As suggested by Haim (1974), the impulsivity of adolescents may predispose some youths to dramatic action such as suicide. Thus, the accessibility of firearms may be a contributing factor to the high rates of adolescent suicide in this province.

When sex is considered, differences are observed both within and between the adolescent and adult age groups. Of the four most prominent methods used, if the notion is accepted that firearms and hangings are more immediate, lethal and violent means than carbon monoxide poisonings and drug overdoses, (Jarvis and Boldt, 1980), two interesting trends emerge. Firstly, as presented in Table 5, males from both age groups tend to select the more lethal and violent means (78% for adolescents, and 59% for adults) while

TABLE 4
PERCENTAGES OF THE METHODS USED IN SUICIDE
FOR YOUTHS (UNDER 20) AND ADULTS (20 AND OVER) BY SEX: 1976 - 1982, ALBERTA

	Y O U T H S			A D U L T S		
METHOD	MALES %	FEMALES %	TOTAL %	MALES %	FEMALES %	TOTAL %
FIREARMS	58.6	30.2	53.9	44.5	10.9	36.7
HANGING	19.4	17.0	19.0	14.9	15.1	15.0
CO POISONING	10.5	15.1	11.2	21.8	18.8	21.1
DRUG OVERDOSE	5.6	30.1	9.6	10.9	41.1	17.9
JUMPING	1.9	1.9	1.9	3.1	4.5	3.5
DROWNING	1.1	3.8	1.6	1.6	4.5	2.2
STABBING/PIERCING	0.4	0.0	0.3	1.8	1.2	1.6
MOTOR VEHICLE	0.4	0.0	0.3	0.3	0.4	0.2
OTHER	2.1	1.9	2.2	1.2	3.5	1.8

TABLE 5
PERCENTAGES OF THE FOUR MOST PROMINENT METHODS USED IN SUICIDE
(PERCENTAGES) FOR YOUTHS (UNDER 20) AND ADULTS (20 AND OVER): 1976 - 1982, ALBERTA

	Y O U T H S			A D U L T S		
METHOD	MALES %	FEMALES %	TOTAL %	MALES %	FEMALES %	TOTAL %
FIREARMS & HANGING	78.0	47.2	72.9	59.0	26.0	51.7
CO POISONING & OVERDOSE	16.0	45.3	20.8	20.8	59.9	39.0
OTHER	2.1	1.9	2.2	1.2	3.5	1.8

females comparatively select the more passive and less immediate means (47.2% for adolescents, 29.9% for adults). Secondly, adolescent males and females tend to select more violent means than their adult counterparts. In fact, firearms and hanging were used by 72.9% of the total number of adolescents who committed suicide. These results suggest a clear suicidal intent, for the majority of adolescents who committed suicide in this province.

Parasuicide In Alberta

Presently, there are no official records kept for parasuicidal behavior in Alberta. As indicated by Pat Orrell (1983), this is primarily because physicians and other officials cannot agree as to what constitutes such behavior, nor have they been appropriately trained to identify parasuicidal and suicidal individuals. Of the professional agencies reviewed by The Task Force on Suicide (Boldt,1976), (for which there were codable responses), 81.8% did not identify "suicidal" clients as such in their files, while 91% did not employ workers who were trained to deal with such clients.

For this reason, it is necessary to consider the parasuicidal statistics of other geographical areas in order to estimate the frequency and trends of such behavior in Alberta. However, it should be noted, that these statistics largely represent parasuicidal individuals who have been brought to the attention of a hospital or institution. As

suggested by Jarvis *et al* (1976), such individuals may not be representative of all parasuicidal individuals.

In addition, such statistics have been shown to lack both validity and reliability. McIntire and Angle (1980) re-evaluated fifty consecutive cases (ages 6 to 17 years old) brought to the attention of two medical facilities in Omaha. Of these cases, 58% had been diagnosed as accidents, while 42% had been diagnosed as suicide attempts. Through the use of interviews, and the extensive collection of background information, they refined the diagnoses in 96% of the cases to 4% accidents, 2% attempted homicides, 22% "trips", 70% suicidal gestures and 2% suicide attempts. For these reasons, the statistics reported which describe parasuicidal behavior must be viewed with extreme caution.

Estimated Rates And Trends

In the United States, a wide range of suicide attempt rates have been published, varying from 43 to 183 per 100,000 (Weissman, 1974). Recognizing the discrepancy in the data, Mintz (1970) randomly selected persons in Los Angeles (fourteen years of age and and older) to answer a questionnaire about attempted suicide. He found a lifetime attempt rate of 3.9 percent or 3,900 per 100,000.

In addition, other studies as reviewed by Weissman (1974), suggest that the attempted suicide rate in the United States is increasing as much as 160 percent per year. However, as these studies were conducted during the late 1960's and early 1970's, such high rates may be reflective

of an increase in the reporting of attempted suicide, due to the decriminalization of such behavior. By way of example, attempted suicide was removed as an offence from the criminal code in Canada in 1972 (Boldt, 1976).

In Ontario, a study by Whitehead, Johnson and Ferrence (1973) suggested that the rates of self injury for this province may be as high as 1,400 cases per 100,000 or 1.4 percent per year. In addition, results of a study performed in Ontario by Jarvis, Ferrence, Johnston and Whitehead (1976) indicated that the self injury rate for the younger age groups (15 to 24) is higher than for the total population. In conclusion, if we accept the results of the studies as indicative of the rate of adolescent parasuicidal behavior in Alberta, this rate is somewhere within the low percentage range.

Across all ages, females are reported to attempt suicide two to three times more frequently than males (Haider, 1968; Jacobson and Tribe, 1972; Weissman *et al* 1973). However, for adolescents, 90 percent of the parasuicidal individuals have been estimated to be female (Balsen and Masterson, 1959; Hawton *et al*, 1982). This estimate is replicated in the samples of the literature studying this phenomenon, where 70 to 90 percent of the parasuicidal adolescents investigated have been female (Tishler, McKenry and Morgan, 1981; Wenz, 1979a, 1979b; Hawton *et al*, 1982). According to Holinger (1978) the principal reason for this observed sex difference is that if

the adolescent male attempts suicide, he is much more likely to succeed.

Methods Used In Parasuicide

Compared with the methods used in adolescent suicide, the methods used in conjunction with parasuicidal behavior are far less lethal.

In a study of 505 parasuicidal adolescents and children in Toronto, Ontario (Garfinkel *et al*, 1982), it was reported that drug overdose was the primary means used (87.9%), followed by wrist lacerations (7.9%) and hanging (1.8%). In a study which also controlled for the sex of the parasuicidal adolescents, Tishler *et al* (1981) reported that again drug overdose was the primary method used for both boys (74%) and girls (87%) followed by lacerations (9% for girls, 16% for boys).

In studies of adult parasuicidal behavior, intent has been successfully correlated with the lethality of the attempt (Bancroft *et al*, 1979; Goldney, 1981). However, this correlation has not been formally studied with adolescents. As adolescents have had less experience with the pharmaceutical drugs and other methods used, intuitively, this correlation may not exist for this age group. Illustrative of the hypothesis is the case as described by Pat Orrell (1983) of a young girl who, by exceeding the recommended daily dosage, took seven aspirin in an effort to harm herself. Clearly, in such cases, the intent would not highly correlate with the lethality of the attempt. McIntire

and Angle (1971), investigated 1,103 cases of self poisonings, in subjects aged six to eighteen years. They found that thirteen percent (primarily in the youngest age group) were considered unintentional, thirteen percent *trips*, 48 percent suicidal gestures and 25 percent had lethal intent.

This absence of lethal intent in the majority of parasuicidal cases is consistent with the literature investigating this phenomenon with adults and young adults (Bancroft *et al*, 1979; Goldney, 1981; Jarvis *et al*, 1976).

Summary And Discussion Of The Statistical Differences Between Adolescent Suicide and Parasuicide

In summary, the following differences between adolescent suicide and parasuicide have been identified.

Sex

According to the statistics and statistical trends, adolescent suicide is predominantly a male phenomenon (83.5% males, 16.5% females), while parasuicide is primarily a female phenomenon (70% to 90% females) (Teshler, McKenry and Morgan, 1981; Hawton *et al*, 1982).

Methods Used

A significant difference exists between the methods used in adolescent suicide and parasuicide. For adolescents who completed suicide in Alberta (1981), 72.9% of these individuals used extremely lethal means such as firearms and hanging. However, for adolescent parasuicide, the research

indicates that different and less lethal means are used in the majority of the cases. For example, in the study by Garfinkle *et al* (1982) the methods used by 95.8% of the parasuicidal adolescents were drug overdoses and lacerations. These data further suggest a difference in the intent of the adolescent suicidal and parasuicidal groups.

These observed differences in sex, methods used and the suggested differences in intent, indicate that the suicidal adolescent may be representative of a different *population* than the parasuicidal adolescent. However, these two groups do overlap to some degree.

It is estimated that 25% to 67% of the adolescents who complete suicide made one or more previous attempts, (Barton, Swaback and Todd, 1969; Jacobs, 1971; Lesse, 1969). In a retrospective study of 764 completed suicides, Patel (1974), found that fifty percent had made previous attempts. What is of interest is the additional finding, that sixty percent of the males and forty percent of the females changed the methods used to a more lethal method for the actual suicide. These results illustrate the intricate overlap between the adolescent suicidal and parasuicidal groups. It may be hypothesized that these initially parasuicidal adolescents made a cognizant change in intent before the lethal act.

In addition, these two groups may overlap in another dimension. Of the adolescents who complete suicide, it is quite conceivable that a small proportion did not have this

intent. As illustrated, of the adolescents who harm themselves, a small proportion may have self destructive intentions. Thus, although there are major differences between these two groups, these groups are related through a common behavior, the act of inflicting self harm.

Although such differences between adolescent suicide and parasuicide can be described through statistics, such descriptions do not facilitate the understanding of these trends. In order to elucidate our understanding of this phenomenon, the following discussion focuses upon the psychological theories and their relevance to adolescent suicide and parasuicide.

III. PSYCHOLOGICAL APPROACHES TO ADOLESCENT SUICIDE AND PARASUICIDE

In the investigation of adolescent suicide and parasuicide, two different approaches to this phenomenon have been utilized by both theorists and researchers. The majority of the literature stems from a *sociological* perspective which characteristically emphasizes the social and environmental factors which contribute to the phenomenon of suicide. In comparison, *psychological* approaches to this phenomenon emphasize the intrapsychic features which may predispose the individual to commit suicide. The psychoanalytic theorists and their followers have been the principal contributors to this intrapsychic approach to suicide. To facilitate an understanding of the psychological approaches to suicide, the historical development of these approaches are first briefly reviewed.

Early in the 1900's the rate of suicide amongst adolescent students increased dramatically (Friedman, 1967). This increase became the primary focus of a small group of "medical men and psychologists" who met weekly in Vienna during the year 1910, to discuss the phenomenon of suicide (Adler, 1910, in Friedman, 1967). The dramatic conclusion of these meetings took the form of a symposium, which was chaired by Sigmund Freud. Paul Friedman (1967) has provided an edited version of the 1910 symposium. It is interesting to note that the principal focus of this symposium was the phenomenon of adolescent suicide.

The historical significance of the meetings and the symposium of 1910 has been summarized by Shneidman (1969). He observed that "the meetings in Vienna were highly unusual in a number of ways:

1. They were the only meetings held by the Vienna psychoanalytic group on the topic of suicide, a subject somehow generally eschewed by those pioneers of the mind.

2. They were meetings that were chaired not by Freud but by Adler...

3. They were held on the temporal threshold of the splintering of the original psychoanalytic group - for within one short year several of the members (Adler, Jung and Stekel included) had left Freud's main camp to set up new bivouacs of their own.

4. They were the occasion of the first enunciation specifically by Wilhelm Stekel, of that perspicacious psychodynamic formulation that the yearning for the death of the self can only be the mirrored wish for the death of another - a telling concept which has both enlightened and bedevilled almost all of the subsequent thinking about the psychodynamics of self destruction.

5. They may very well have stimulated the developments of Freud's own further thoughts on death and suicide...

6. They focused on the role of education - that is, the role of learning, pedagogy, of acculturation and environment in suicide...

7. The 1910 meetings speak to us today, having addressed themselves to some of the ubiquitous and magnotemporal aspects of man, those omnipresent elements of man's make-up, especially the relation to his self-destructive drives and his often inimical roles in his own fate. (Shneidman, 1969, pp. 2-3).

The primary purpose of this chapter is to review and discuss the psychological approach to suicide. In appreciation of the historical works of Freud and Adler, the author has selected to begin with a summary and discussion of their respective theories of suicide. However, since

1910, psychological approaches to suicide have undergone many changes. As summarized by Shneidman (1969) such changes include: a consideration of the varieties of intention, the role of a significant other in the suicidal dyad, the role of affective states other than hostility, and a growing appreciation of the role of age (or time of life) in suicide.

In the discussion of the psychological processes of adolescent suicide, the most significant of such changes is the growing consideration of the role of age in suicide. However, as Shneidman acknowledges:

> One important implication of this insight is that it is not likely that one all-encompassing psychology of suicide will be forthcoming. What is more likely is that we shall have psychologies of self-destruction, each relating - most relevently to a specific stage in life. These might be tied to such conceptualizations as Shakespeare's ages of man, Erikson's psychosocial stages in the human life cycle, Heard's stages of man, Sullivan's developmental epochs, Charlotte Buhler's stages in the human course of life, Schachtel's periods in the human metamorphosis, Jung's two main stages of man's life, or on some newly developed concept of death orientation in man. (Shneidman, 1969, p. 11).

To review each of these suggested authors is beyond the scope of this chapter. However, the author has selectively reviewed the theories proposed by Sullivan, due to his unique interpersonal approach toward personality development, and Erikson, due to his focus on the adolescent stage of development. This chapter concludes with an evaluative discussion of the psychological approaches to adolescent suicide and parasuicide.

A. A Summary And Discussion Of The Freudian Approach To Suicide

In order to fully appreciate the psychoanalytic approach to suicide, it is necessary to briefly review the principal components of Freud's theory of personality with special emphasis paid to instinct theory. Freud proposed that man was intrapsychically motivated by two polar instincts or drives:

1. *Eros* or the life instinct and
2. *Thanatos*, the death instinct (Freud, 1950).

A drive was described as a generically determined psychic constituent which is aroused by both external and internal stimuli and impels the individual to activity. Although generically determined, the ego may modify such instinctual drives through experience and reflection. Freud believed that these two processes differentiated man from lower animals (Futterman, 1961).

Eros, or the life instinct was described as a sexual drive which consisted of the erotic component of man's nature. In comparison to Thanatos, it is a liberal drive which strives for and develops through new experiences. Thanatos, or the death instinct, was described as an aggressive drive which consisted of man's aggressive and destructive motivations. It is essentially a conservative drive which strives for a state of complete rest (Futterman, 1961).

Freud (1950) proposed that neither drive exists independently of the other, but are fused in different degrees within each individual. Such fusion within the normal individual results in the disarming of the aggressive drive's destructive tendencies and enables the sublimation of the sexual drive, through the neutralizing component of *love*. Both drives have the capacity for fixation and regression which may thwart this fusion process (Futterman, 1961).

During infancy, the child develops both hostile and loving feelings toward the mother. The hostile feelings are aroused whenever the child is frustrated by the mother's impositions. The *Oedipal* phase of development is characterized by a heightening of such frustration. During this phase, the child incorporates the love object (the mother) into the superego which serves to mediate between the dependent love and hostile feelings toward the love object. The ego recognizes that the goals of the aggressive drive are incompatable with the needs for gratification. Thus, anxiety and guilt result, which are defused through the development of defense mechanisms (Freud, 1950). When this process is hindered through the fixation of the aggressive instinct, Freud proposed that the individual regresses to a state of melancholia. Within this state, the realistic perceptions and apperceptions of the object world decreases. This process is characterized by the ego's identification with a love object which becomes lost, either

in reality or fantasy. This process becomes regressively incorporated resulting in this aggression being turned inward as a means of possession destruction. This self attack may take many forms such as somatic complaints, excessive severity of the superego or self destruction, characterized by depression (Freud, 1955). Thus, suicide was seen by Freud to be an aggressive explosion directed toward the self and is symbolic of an attack on the lost love object.

The loss of a love object resulting in regression and depression is central to Freud's theory of suicide. Furthermore, Freud concluded that depression involved aggression toward a significant person. Thus, according to Freud, the necessary conditions precipitating suicide were a depressed state and the desire to kill someone else (Hendin, 1961). However, Hendin (1961) stressed that these conclusions were based upon the study of depressed patients rather than suicidal patients. He observed that "Freud's case write-ups included reference to only one patient who made a suicidal attempt" (p. 183). Thus the generalizability of Freud's theory to suicide and parasuicide is questionable.

Through the study of suicidal patients Hendin (1961) concluded that "the psychodynamics of depression are not sufficient to explain suicide" (p. 85). He observed that many of his suicidal patients neither exhibited the dynamics nor the clinical symptoms of depression. Such observations

are consistent with the findings of other investigators studying suicidal and parasuicidal adolescents (Goldberg, 1981; Goldney, 1981; Peck, 1968).

In a review of the literature, Anthony and Scott (1970) emphasized that it is extremely rare to find a clear cut depressive illness in adolescents. Consistent with this finding, other investigators have found respectively low occurrences of depression and psychiatric disorders among suicidal and parasuicidal adolescents (Goldberg, 1981; Garfinkel *et al*, 1982; Goldney, 1981; Peck, 1968). However, other studies have reported an extremely high occurrence of depression and psychiatric disorders amongst such adolescents (Pokorny, 1964; Guze and Robins, 1976; Crumby, 1982).

The reasons for such discrepant findings are three-fold. Firstly, in the consideration of depression, it has been proposed that, the symptoms of depression among children and adolescents vary with the developmental level achieved. In addition, during adolescence, depression may be masked by acting out tendencies and delinquent behavior (Greuling and DeBlassie, 1980). Recently, the Diagnostic and Statistical Manual of Mental Disorders, Vol. III (DSM III, 1980) has identified "age specific associated features" of depression for the young, (DSM III, 1980, p. 11). However, it is interesting to note that of all the articles reviewed by the author investigating the existence of depression and idiosyncratic disorders amongst suicidal and parasuicidal

adolescents, only one (Glaser, 1981) makes references to the DSM III classification. The vast majority of the other investigators fail to report the criterion used to identify depression amongst the subjects under study. In the absence of the application of a consistent and clear symptomatology of depression, the reliability and validity of the results of such studies are extremely questionable.

Secondly, the majority of studies finding a high occurrence of depression have been carried out by psychiatrists on adolescents who have been hospitalized or institutionalized following a suicide attempt (Pokorny, 1964; Guze and Robins, 1976; Crumby, 1982). As previously discussed, such samples are not representative of suicidal and parasuicidal adolescents. In addition, Glaser (1981) points out that in the study of such isolated adolescents, it is impossible to determine if the observed depressive symptoms are the result of an underlying depression or a reaction to the restriction and isolation which has occurred since the suicide attempt.

Finally, in considering adolescent pathology in a more general sense, Haim (1974) in a review of the literature, discovered that the authors themselves admitted only one pathological feature amongst suicidal and parasuicidal adolescent has been clearly identified. He asserts:

> The majority of them are regarded as normal; they may possess isolated or ill-defined, relatively unstructured pathological features, but these are not enough to put them in any kind of nosographic category. So if we wish to keep within the criteria of mental pathology proper, we can say at most that

> between 20% and 30% of suicides are mentally ill according to the various estimates that have been made. (Haim, 1974, p. 185).

In view of such conflicting results, one can conclude that the relationship between adolescent suicide and parasuicide and psychiatric disorders is inconsistent and confounded by methodological problems. Such findings constitute a principal limitation to the application of Freud's theory of suicide to adolescent suicidal and parasuicidal behavior.

A final limitation of Freud's theory is that he neither recognizes nor accounts for the phenomenon of suicide and parasuicide amongst females. Freud maintained that conflict within the oedipal phase of development is a central precipitant to later depression and suicide. However, this process applies only to males. As adolescent females do commit suicide, and have a higher occurrence of parasuicidal behavior, Freud's theory has limited applicability to this phenomenon or to the investigation of the sex differences observed between adolescent suicide and parasuicide.

In conclusion, in the investigation of the differences between adolescent suicide and parasuicide, Freud's hypotheses have little relevance. His theory neither sufficiently accounts for adolescent suicidal behavior nor for the differences observed between suicidal and parasuicidal individuals.

B. A Summary And Discussion Of The Adlerian Approach To Suicide

The Adlerian theory of personality is essentially a theory of personality dynamics which views the individual as a unified and unique whole (Ansbacher, 1961). Adler (1929) proposed that man is motivated by a perpetual drive for superiority, perfection and success. The self concept of the individual is dependent upon the concrete attainment of successive goals. However, the individual may not be consciously aware of the goals he is striving to obtain.

Adler's theory of personality can be described as a field theory which consists of the individual within a specific social environment. The individual is influenced by the social milieu, and in turn his actions have social consequences. The goals of productive individuals are consistent with the goals of the greater social environment. However, if an individual's goals are counterproductive to the interests of the social milieu, such individuals are considered to be mentally unhealthy and a liability to the community. Adler proposed that such individuals suffered from a lack of *social interest* and thus differentiates healthy from unhealthy individuals on this basis. Deficiency in social interest is then the principal characteristic of neurotics, psychotics, alcoholics, drug addicts, prostitutes, perverts, criminals and suicidal individuals. According to Adler, such individuals lack the capacity to understand and accept the social interrelatedness of human

life (Ansbacher, 1961).

Adler (1956) proposed that the potential for social interest is an innate disposition or aptitude. However, it "must be trained and exercised or its development will be stunted" (p. 371). The development of the indivudual is facilitated by the successful completion of imminent tasks in accordance with his self-consistency. The approach to each task requires an adequate amount of social interest to accomplish its correct solution. Adler (1958) proposed that suicide is a solution for individuals who are faced with a significant problem and lack the social interest by which the correct solution may be realized (Ansbacher, 1961).

Adler (1958) felt that all suicides depart from the social interest of the greater community. This departure occurs in an active way which harms both the individual himself and others around him. Suicidal individuals suffer from a total lack of social interest through both active and passive failures and the resultant development of *inferiority*.

Adler proposed that the development of inferiority could be traced back to early childhood. He asserted that suicidal individuals were problem children, spoiled, complacent and oversensitive. In the face of loss or defeat, they are poor losers and tend to manipulate others through complaining, sadness and suffering.

> Among the early childhood expression of the suicide, one also finds the deepest grieving, often over negligable matters, strong wishes to become sick or to die when humiliation is experienced, tantrums

> with wilfull self injury and an attitude toward others as if it were their duty to fulfill his every wish. (Adler, 1958, p. 60).

Adler felt that such children developed into mentally unhealthy adults lacking in social interest. The life style of such individuals is characterized by his tendency to hurt others by unconsciously incurring injuries or by self mutilation. The act of suicide results from a significant confrontation or failure for which such individuals lack the necessary social interest to construct an appropriate solution.

It should be noted that Adler's conception of suicide was developed through the hypothetical extension of his personality theory and not through the study of suicidal individuals. Thus, with regard to adolescent suicidal behavior, his theory has questionable relevance.

Adler's narrow and negative depiction of the suicidal child is inconsistent with the findings of other literature. Peck (1968) in a study of suicidal boys observed that the majority of these youths were not behavioral problems but quiet, compliant youths who tended to over-internalize their difficulties. Teicher (1973) found that for the suicidal adolescents he investigated, 87 percent of all *behavioral problems* which they had ever exhibited began within the past five years. He observed that actions such as rebellion (including defiance and sassiness), withdrawal into self (including gloominess), lying and physical withdrawal are viewed by parents as behavioral problems. The adolescents

however viewed these as both behavioral problems and adaptive techniques. Such adolescents were hopeful that the parents would recognize such behaviors as indications that a significant problem existed. In addition, they felt that such behaviors were the only means available by which they could bring such problems to their parents' attention.

These studies do not depict the suicidal adolescent to be the self-centered, spoiled, acting out and manipulative child which Adler describes. Instead, the suicidal adolescent is described as a helpless and hopeless individual who resorts to drastic measures in order to force attention on an existing problem (Peck, 1968).

Although Adler proposed that all suicidal behavior is maladaptive, the adolescent considered the suicide attempt to be the only "adaptive behavior" available at the time of the event. Glaser (1981) described such suicidal and parasuicidal behavior as an act of desperation and a cry for help since other avenues of coping have been explored or are unattainable. Thus, Glaser as well as other investigators (Sifneos, 1966; Jacobs, 1971) suggest that the self abusive act is usually a desparate effort of the adolescent to improve his life.

In view of the foregoing discussion it is clear that Adler's narrow view of the suicidal process bears little resemblance to the process observed by the investigators of this phenomenon. In addition, Adler neither identifies or differentiates between parasuicidal and suicidal

individuals. In view of these limitations, it can be concluded that Adler's theory of suicide has little relevance to adolescent suicide and parasuicide or in differentiating between these two behaviors.

C. A Summary And Discussion Of The Sullivanian Approach To Suicide

In contrast to Freud and Adler, Sullivan (1953) rejected the notion of biologically predetermined drives. He instead focussed upon particular patterns of interaction between identified persons within a specific environment. Sullivan believed that human relatedness was the very core of character and personality. He felt that the attitudes of individuals were determined through unique interpersonal experiences and rejected the notion of simple generalized formulations of a typology of human nature. Thus, Sullivan chose to restrict his theory of personality to the interpersonal experiences which occur within the self and with other individuals. According to Sullivan, the *self* consisted of the appraisals of significant others which have been accumulated and reflected upon during the development of the individual. The development of the self as an entity begins at infancy and is characterized by *personification* (Green, 1961).

Personification refers to the symbolic elaboration of interpersonal experiences which result in the expectation of certain patterns of interpersonal events. Through the

process of recall and foresight the child develops a structure which Sullivan labels *me*, *mine* and *I*. This process continues with the young child's personification of *good me*, *bad me* and *not me*, and are later associated with personifications of the *good mother* and *bad mother* (Green, 1961).

Throughout the child's development, this process of personification continues to develop. More complex interpersonal experiences are facilitated by language development and by the widening of the social environment of the child. The personifications of *me* and *we* become salient during childhood. During pre-adolescence and adolescence, other important personifications occur, namely the personifications of *chum* and the personification of a preferred sexual partner.

Behavior during adult life is determined by unresolved conflicts and failures as well as early successful interpersonal experiences and personifications. However, Sullivan did not view the individual's life as a closed system. Interpersonal experiences during adult life were also of major importance in the continuing development of personality (Green, 1961).

Sullivan stressed the importance of the affirmation of self through successful interpersonal experiences with significant others. Through such experiences, the healthy adult develops the capacity for loving and the realization of the worth of those he loves. Suicide was seen by Sullivan

to be a hateful and destructive act which results from hostile and maladaptive interpersonal experiences with significant others.

Sullivan believed that no one set of factors predetermines the individual's potential for suicide. However, inadequate or false personifications may affect the degree to which the individual is handicapped and unable to participate in interpersonal relationships. Such handicaps result in *anxiety*, which Sullivan proposed was the debilitating element in personality malfunctioning. Unsuccessful early experiences resulting in anxiety may distort the individual's self perceptions and cripple their personality dynamisms, leading to serious mental disorders in adulthood. However, Sullivan did not recognize a direct relationship between earlier experiences and a typology of mental disorders (Green, 1961).

Sullivan (1956) felt that suicide was a possible event for individuals suffering from a variety of idiosyncratic problems. However, he claimed that a theory of suicide could not be formulated due to the difference between individual experiences. Nevertheless, Sullivan believed that all suicidal individuals suffered from a depressive syndrome. In accordance with Freud, he felt that once a person had regressed to this state, he is preoccupied with self depreciating thoughts and thus his activities and preceptions are restricted. Sullivan differentiated such individuals from parasuicidal individuals whom he believed

suffered from a less malignant neurotic condition. Such conditions he felt predisposed adults to childish and spiteful threats to kill themselves. He suggested that such individuals could be effectively treated through firm management (Green, 1961).

In summary, Sullivan believed that all psychological disorders arise from unsuccessful interpersonal experiences beginning in early childhood. Suicide is a symptom of a variety of disorders and is characterized by a depressive syndrome. However, Sullivan rejects the notion that any one theory of suicide may encompass the individual experiences which predispose a person toward this act. Sullivan also differentiated depressed individuals who may be suicidal from neurotic individuals who in an effort to manipulate others, verbally threaten to kill themselves verbally or through suicidal gestures.

Sullivan's assertion that all suicidal individuals suffer from a depressive syndrome is consistent with Freud's views of suicide. However, as previously discussed, the relationship between depression amongst adolescents and suicide is extremely confounded in the literature. In this regard, Sullivan's theory suffers from the same limitations as Freud's.

Unlike Freud and Adler, Sullivan recognized that there may be a difference between suicidal and parasuicidal individuals. He proposed that the latter suffer from a neurotic rather than a psychotic disorder. However, this

hypothesis is inconsistent with the findings of researchers investigating the occurrence of adolescent parasuicide(Hawton *et al*, 1982; Garfinkel *et al*, 1982; Goldney, 1981; Tishler *et al*, 1981).

Hawton *et al* (1982), in a study of fifty parasuicidal adolescents found that only 20 percent suffered from either a minor depression or personality difficulties. Garfinkel *et al* (1982) in their study of 505 parasuicidal children and adolescents found a similarly low percentage of neurotic or psychotic disorders. These findings are consistent with other recent studies (Goldney, 1981; Tishler *et al*, 1981).

However, Sullivan did recognize that one personality theory could not account for the phenomenon of suicide and parasuicide. He proposed that the individual's interpersonal experiences were the contributing factors in the suicidal process. Such experiences are determined by the social environment which in turn effect the intrapsychic experiences of the individual. Such dynamics cannot be accurately accounted for within the psychoanalytic framework. However, Sullivan failed to elaborate on this point of view and accepted the psychoanalytic perspective which was first presented by Freud. This theory proposed that all suicidal and parasuicidal individuals must be suffering from either a major or minor psychiatric disorder.

D. A Summary And Discussion Of The Eriksonian Approach To Suicide

Although Erik Erikson was trained as a psychoanalyst, his primary contribution to psychological theory was within his departure from the traditional psychoanalytic doctrine (Noem *et al*, 1982). Erikson built upon his acceptance of the psychosexual biological givens of Freud by considering the psychosocial dynamics of personality development and emphasized the individual's adjustment to the social and historical environment into which he is born (Monte, 1977). The "environment" was defined by Erikson as the "social reality as transmitted to the child during successive childhood crisis" (Erikson, 1968; p. 211).

Central to Erikson's concept of personality development was the formulation of eight "epigenetic" psychosocial stages of ego development (Monte, 1977). Each successive stage of the life cycle was described as a discreet "crisis" period.

> Crisis is used here in a developmental sense to connote not a threat of catastrophe, but a turning point, a crucial period of increased vulnerability and heightened potential, and therefore, the ontogenetic source of generational strength and maladjustment (Erikson, 1968, p. 96).

Within his stages of the life cycle, Erikson described the development of the healthy and sexually mature adult. He proposed that sexual maturity depended upon the successful formation of an identity during the adolescent stage of development. In turn, the foundations of an identity were achieved through the childhood acquisitions of basic trust

and the ability to see oneself as having continuity and sameness (Erikson, 1978). Erikson's eight stages of psychosocial development can be summarized as follows:

1. Infancy (oral sensory): Trust *vs* .Mistrust
2. Early childhood (muscular-anal): Autonomy *vs* .Shame
3. Play Age (locomotor-genital): Initiative *vs* .Guilt
4. School Age (latency): Industry *vs* .Inferiority
5. Puberty and Adolescence: Identity *vs* .Role Confusion
6. Young Adulthood: Intimacy *vs* .Isolation
7. Adulthood: Generativity *vs* . Stagnation
8. Maturity: Ego *vs* .Despair

(Noem *et al*, 1982, p. 30).

Of special interest, is the emphasis paid by Erikson to the developmental stage of adolescence. Erikson (1968), described adolescence as the pivotal period between childhood and adult life. He asserted that due to technological advances, the "stage of adolescing becomes an even more marked and conscious period...and almost a way of life between childhood and adulthood" (Erikson, 1968, p. 128).

Erikson believed that a feeling of being alive did not exist without a sense of identity. The challenge or crisis presented to adolescents is then to develop such a sense of identity *versus* to be developmentally immobilized by identity confusion. The period of the adolescent's search and experimentation with identity roles was described as a "psychosocial moratorium" or "a period of delay of adult

commitments,...characterized by a selective permissiveness on the part of society and a provocative playfulness on the part of the youth," (Erikson, 1980, p. 157).

This period of delay, allowed for the necessary integration of identity elements with the foregoing crises of the earlier childhood stages. Thus, during adolescence the youth must again come to grips, and in some cases re-experience such crises in a search for continuity and sameness (Erikson, 1968). For the adolescent who has failed to resolve the crises of earlier stages or is overwhelmed by the identity roles presented, the moratorium of adolescence may be extended into an immobilizing period characterized by "identity confusion" . Erikson illustrates the essence of such confusion through "Biff's formulation in Arthur Miller's Death of a Salesman: "I just can't take hold, Mom, I just can't take hold of some kind of life...." (Erikson, 1968, p. 131).

Erikson proposed that it was this inability to settle on an identity which most disturbed young people. He asserted that although the symptoms of such confusion may resemble neurosis or psychosis, such symptoms are normative for most adolescence and are transitory or transferable. Erikson states:

> It is not always easy to recall that in spite of the similarity of adolescent "symptoms" and episodes to neurotic and psychotic symptoms and episodes, adolescence is not an affliction but a normative crisis, i. e., a normal phase of increased conflict characterized by a seeming fluctuation in ego strength as well as by a high growth potential. (Erikson, 1968, p. 163).

However, Erikson did recognize the existence of adolescent psychopathology. He described such pathologies in terms of "acute identity confusion" which was embedded in the regression to earlier childhood crises. He proposed that such pathologies served the social funciton of allowing the adolescent to maintain a state of minimal commitment.

The first of such pathologies was described as a "problem with intimacy" resulting from the regression to the Trust *vs.* Mistrust childhood stage of development (Erikson, 1980). Adolescents suffering from such regression perceived intimate relationships as resulting in a loss of identity. As Erikson describes:

> For where an assured sense of identity is missing, even friendships and affairs become desperate attempts at delineating the fuzzy outlines of identity by mutual narcisstic mirroring: to fall into one's mirror image, hurting oneself and damaging the mirror. (Erikson, 1968, p. 167).

The symptoms of this regressed state consisted of isolation, disintegration of the ego, and an inability to derive a sense of accomplishment.

In extreme cases of acute identity confusion, Erikson also observed that adolescents experienced disturbances in the perception of time. Such distortions consisted of contradictions including "a sense of great energy and yet a loss of the consideration for time as a part of living" (Erikson, 1980, p. 167). The adolescent may complain, give up, or quit, which Erikson described as expressions of a deep despair in life. However, he did not feel that such despair was a sign of suicidal tendencies but instead a

reaching out for assistance in finding a new begining in life (Erikson, 1968).

In addition to the pathologies associated with acute identity confusion, Erikson described a final danger within the adolescent stage of development. Erikson believed that within each individual a negative aspect of oneself is harboured. If such negative roles are presented to the adolescent, he may accept or vindictively choose such roles and thus internalize a "negative identity":

> i.e., an identity perversely based on all those identifications and roles which, at critical stages of development, had been presented to the individual as most undesirable or dangerous, and yet also as the most real. (Erikson, 1980, p. 142).

The choice of a negative identity was dictated by the desire to find an individual niche in response to the excessive ideals and demands of parents and superiors. Such choices evolved from conditions in which it may be easier for the adolescent to identify with what he is least supposed to, rather than to struggle for acceptable roles which are perceived as unattainable.

> At any rate many a late adolescent, if faced with continuing diffusion would rather *be nobody, or somebody bad, and this totally, or indeed, dead - by free choice - than be not-quite-somebody*. (Erikson, 1980, p. 143).

Although Erikson did not propose a formal theory of suicide, his theory of personality development has many relevent implications to adolescent suicidal behaviors. He proposed that the truly suicidal adolescent is one who chooses and accepts the negative identity (or perhaps

non-identity) of death. As Erikson states:

> ...the "wish to die" is a really suicidal wish only in those rare cases where "to be a suicide" becomes an inescapable identity choice in itself. (Erikson, 1968, p. 170).

What is further implied by Erikson's theory, is that such adolescents perceive that the attainment of a positive or acceptable identity within society, would be a futile struggle.

In the area of adolescent suicide, few studies have investigated the identity perceptions of the suicidal youth. However, the results of such studies tend to support Erikson's proposals. Weinberg (1970) and Peck (1968) both observed that suicidal males perceived the existence of obstacles which inhibited the fulfillment of a masculine role. McIntire and Angle (1980), in a study of suicidal adolescents and children, found that for adolescent males homosexuality was frequently reported. From such studies it may be concluded that the perceived identity of the adolescent, could be a contributing factor to suicidal behaviors and is in need of further investigation.

In comparison, the parasuicidal adolescent may have been described by Erikson as suffering from acute role confusion. As previously reviewed, Erikson proposed that for the majority of adolescents, such confusion was a transitory state within the adolescent stage of development. It is interesting to note that in a follow-up investigation of parasuicidal adolescents, Hawton *et al* (1982) found that one month after the parasuicide, two-thirds of the subjects

showed considerable improvement or a total resolution of the precipitating problem.

Although Erikson's theory of personality development may have valid implications toward adolescent suicidal and parasuicidal behaviors, his theory also contains certain limitations. It is important to consider that Erikson's theory of adolescence was developed in the 1950's and 1960's, a time which corresponds to the "youth counter cultural movement" (Balswich and Balswich, 1980). The youth of this era have been described as "rebellious" and "uncommitted" (Kenninston, 1965, 1968). Erikson's theory reflects such descriptions through the emphasis paid to the uncommitment of youth and delinquency. However, the youth of the 1970's and perhaps the 1980's have not displayed similar counter cultural behaviors, but have instead been described as being conforming and accepting of society's restrictions and values (Balswick and Balswick, 1980). Thus, Erikson's theory of adolescence may lack clear relevance to the dynamics displayed by the adolescents of today.

In addition it must be remembered that Erikson did not formulate a theory of suicide. However, as previously reviewed, his attention to the issues which are salient during the adolescent stage of development have important implications toward adolescent suicide and parasuicide. Unfortunately, thus far there is little research investigating the significance of such implications. His contributions to the study of adolescence does however

provide an approach to the psychological processes involved in adolescent suicide and parasuicide, which is different from the approaches previously reviewed. A comparative evaluation of these approaches is subsequently presented.

E. Discussion And Evaluation Of The Psychological Approaches To Adolescent Suicide And Parasuicide

The principal similarity between the personality theories proposed by Freud, Adler and Sullivan is the central hypothesis that both suicidal and parasuicidal individuals suffer from psychiatric or neurotic disorders. Such hypotheses stem from the assumption that suicidal and parasuicidal acts are irrational and maladaptive and thus, can only be justified by the individual's distortion of perception and reality. This assumption is reflected in the writings of other psychoanalysts and suicide theorists. For example, Menninger (1933), in describing such behaviors states:

> One gets the impression for such people, the suicidal act is sometimes a kind of insincere play acting and that their capacity for dealing with reality is so poorly developed they proceed as if they could actually kill themselves and not die. (p. 376).

Trautman (1961), described the suicidal act "as a sudden impulsive act in which the person did not think rationally and behaved as if in a trance" (p. 76). These theorists assume that all suicidal and parasuicidal individuals suffer from a distortion of reality at the time of the suicidal act. This distortion occurs even in the

absence of a previously identified psychiatric disorder.

It should be noted that such assumptions stem from the observations of depressed and institutionalized suicidal patients who have been removed from their primary social environments. Indeed, if suicidal and parasuicidal behavior is observed within such narrow parameters, it would appear to be both irrational and maladaptive.

However, as previously discussed, such observations lack generalizability to the adolescent suicidal and parasuicidal populations due to sampling and methodological considerations. In addition, the failure to differentiate between suicidal and parasuicidal individuals and the failure to consider the social environments of such individuals further limits the applicability of these theories.

It cannot be disputed that the behavior of adolescents who intentionally attempt or commit suicide can be described as maladaptive when viewed within such a restricted framework. However, if one considers the social and familial environments, parasuicidal behavior may be viewed as the only adaptable option remaining for such youths. Thus, in the serious investigation of the psychological processes involved with adolescent suicide and parasuicide, the specific intent and environmental influences must be considered in order to generate meaningful conclusions. Such theorists have failed to consider both of these variables.

In contrast, through the observation of youths within their social and familial environments, Erikson developed a theory of adolescence which opposes such deterministic views. Through such observations he asserted that many of the seemingly abnormal behaviors identifiable amongst adolescents were in fact normative, transient and tranferable symptoms of the adolescent stage of development. However, such propositions have been recognized by few investigators studying the psychological processes of adolescent suicidal and parasuicidal behaviors.

The acceptance of the suicidal processes proposed by such theorists as Freud, Adler, Sullivan and their followers, has contributed to an identifiable bias in the literature investigating adolescent suicide and parasuicide. Characteristically the research conducted from this primarily psychoanalytic framework, depicts such adolescents as suffering from either a major or minor psychiatric disorder. This bias stems from the circular and false logic that all suicidal behavior is symptomatic of psychiatric disorders. An illustrative example of this bias is a study performed by Crumby (1981) entitled *The Adolescent Suicide Attempt: A Cardinal Symptom Of A Serious Psychiatric Disorder*. Within this article, Crumby claims that "the implications of the attempt to take one's life apply to any disorder" (p. 159).

As previously illustrated, such findings are inconsistent with the results of the majority of other

literature which has been primarily conducted by sociologists and social psychologists. The results of such studies have indicated that the social and environmental influences are perhaps the most significant precipitants to adolescent suicide and parasuicide.

These two conflicting viewpoints have important therapeutic implications. If one were to accept the primarily psychoanalytic position that suicide and parasuicide are symptomatic of psychiatric disorders, individual psychotherapy would be the indicated intervention. However, if one accepts the position that the suicidal process is precipitated by environmental and social factors, the prescribed intervention would be radically different. The therapist would have to observe the individual within his social milieu and consider the family, school and other social variables in the construction of an effective intervention. However, the existing literature is not conducive to the construction of such therapeutic strategies.

Presently, the identified trend in Alberta, that more adolescents are resorting to suicidal and parasuicidal behaviors (Soloman and Boldt, 1976) suggests a vital need for the construction of effective prevention, intervention and postvention strategies. However, before such strategies can be confidently generated, researchers must focus upon unravelling the relationship between adolescent suicidal and parasuicidal behaviors, develop reliable methods of

identifying such youths and investigate the relationship between the social and psychological processes precipitating the event. Until such strategies are effectively developed, intervention may only occur after an identified suicidal or parasuicidal attempt. However, for an increasing proportion of adolescents, such intervention will be too late.

IV. SOCIOLOGICAL APPROACHES TO ADOLESCENT SUICIDE AND PARASUICIDE

A. Sociological Theories of Suicide

In the late nineteenth century, Emile Durkheim performed the first significant study in suicide. He acknowledged that suicide rates differed between cultures, groups and the time periods he considered. Durkheim proposed a theory to encompass such fluctuations in the suicide rates. He accepted the sociological perspective, that an individual behaves in response to external rather than internal forces. His theory focuses upon such forces and how they interact with the individual to facilitate suicidal behavior.

Durkheim proposed four categories of suicidal behavior: egoistic, anomic, fatalistic and altruistic. The first category, *egoistic*, refers to the individual who takes his life due to the loss of involvement with society. This category is characterized by the individual's lack of significant support structures. The term egoistic is derived from the notion that the isolated ego will break down in the absence of affirmation.

In studies of adolescent suicide, researchers have attempted to describe the progressive isolation of the youth prior to the suicide event (Jacobs, 1971; Teshler *et al*, 1981; Wenz, 1979b). The two primary motives provided by parasuicidal youths have been, 1) conflict with parents and

2) conflict with a member of the opposite sex (Teshler *et al*, 1981). In addition, a consistent trend in the literature suggests that a disproportionate number of suicidal and parasuicidal adolescents have been separated from one or both parents (Birtchnell, 1970; Leon *et al*, 1972; Crook and Raskin, 1975; Morgan *et al*, 1975; Goldney, 1981). This separation has been associated with the youth's failure to complete the developmental phase in which the formation of an identity is achieved (McAnarney, 1979). Jacobs (1971), in a study of adolescents who attempted suicide, identified isolating events, such as the separation from significant others, to be one of the primary factors precipitating the attempt. Jacobs hypothesized that, in the absence of relationships with significant others, the adolescent regressed to a state of hopelessness. Durkheim would conclude that such youths have become isolated from society through the deterioration of relationships and thus, they attempt suicide.

The second category of suicide, *anomic*, describes the individual who cannot cope with life, due to the loss of regulation within his environment. Society itself is riddled with confusion or the individual's life experience no longer fits an organized and familiar context. The result is a sense of disruption within the individual's equilibrium. This disorganization is a consistent trait of the suicidal adolescent's family and social environment. The lack of traditional structures such as religion has been observed

within the environment of the suicidal adolescents (Garfinkle *et al*, 1982), while the suicide rate of cultures with strong religious beliefs is significantly lower (Farberow, 1972). Higher rates of suicide have also been associated with transient societies (Shneidman and Farberow, 1957; Bourne, 1973). Jacobs (1971) found that the adolescents he studied who attempted suicide had made a significantly greater number of moves than a comparative sample of adolescents.

Typically, the adolescent's family is also void of consistent organization and has a history of turmoil such as divorce, illness, role confusion and death (McArney, 1979; Carmen and Blaine, 1970; Tuckman and Cannon, 1962; Preffer, 1981). Wenz (1979) describes such family systems as anomic, and he identifies the adolescent as the vulnerable participant. Of similar importance, is the finding that within such families, communication between the parents and the adolescent is hindered. Hawton *et al* (1982) estimate that 89 percent of the suicidal and parasuicidal adolescents they studied were unable to discuss problems with their father, while 48 percent could not with their mother. These results were compared with the finding that 9.5 percent of fifteen year olds within the general population had difficulty talking to their parents. Thus, suicidal and parasuicidal adolescents have limited resources and supports to aid them in restoring a sense of order to their environment.

The third category proposed by Durkheim is fatalistic suicide. Although Durkheim did not elaborate upon this category, it may be applicable to adolescent suicidal and parasuicidal behavior today. Fatalistic suicide describes individuals who are thwarted in their efforts to make decisions or have their decisions blocked through excessive regulation. This category is descriptive of adolescents in our society who are repressed by artificial regulations. John J. Mitchell, in his book, *The Adolescent Predicament* (1975), describes this phenomenon quite eloquently. He suggested that through the artificial extension of adolescence, we restrict our youth's scope of decision making and their opportunities to make significant contributions to society (Mitchell, 1975). In addition, the parents of suicidal youths have been described as overprotective, and thus impose further restrictions on the adolescent's activities (Cantor, 1972; Wright, 1982). Durkheim would conclude that the youth, in the face of such repression, would resort to suicide to escape from such a restrictive environment.

Durkheim's final category of suicide, *altruistic*, describes individuals who take their lives through the over-identification with social values. The Kamikaze pilot is illustrative of this category of suicide. However, altruistic suicide has little relevance to adolescent suicide and parasuicide. As has been illustrated, adolescents tend to be isolated from society and lack the

opportunity to internalize societal values. Thus, in western society, there are few cases of adolescent suicide where the altruistic category would be descriptive of the individual's motives to take his own life.

Although Durkheim's theory of suicide was developed in the late nineteenth century and focused upon adult suicide, it holds relevance to youth suicide today. However, his theory contains serious limitations which are subsequently discussed.

B. An Evaluation Of The Sociological Approach To Suicide

Durkheim's theory was based on the nineteenth century statistics of completed adult suicide. Due to the limitations of recording techniques, the perhaps more strongly pronounced "taboos" of society and problems which remain to abstruct the collection of suicide statistics, the validity and reliabiltiy of Durkheim's results could be questionable. This limitation weakens the impact of his theory. More importantly, significant age and sex trends of suicide have been observed within the present population. Durkheim's theory does not sufficiently explain these trends. In addition, conclusions based on the statistics of completed suicide have little generalizability to the occurrence of parasuicide. Thus, Durkheim's theory is seriously limited in its application to youth suicidal and parasuicidal behavior today.

Durkheim's theory has little therapeutic value in the treatment of youth suicidal behavior today. His theory lends itself to the conclusion that the prevention of suicide must occur through significant changes within the environment of the individual. Although changes within the social milieu may effect the broad occurrence of suicide, such a solution does little to aid the suicidal adolescent in his present environment. Finally, Durkheim hypothesized that the individual's life in society consisted of *collective life* and *others* (Durkheim, 1952). He did not consider the family to be a significant factor. However, as illustrated, the family represents perhaps the most important environment of the suicidal and parasuicidal adolescent. Zaristsky (1976) elaborated on Durkheim's position by proposing that the individual's life consisted of two spheres: the public or workspace and the private or family. These two spheres are considered in the following investigation of the psycho-social factors which precipitate suicide and parasuicide. Within this investigation, the author has placed special emphasis on the sex differences and the increasing rates of adolescent suicidal and parasuicidal behavior.

V. PSYCHO-SOCIAL APPROACHES TO ADOLESCENT SUICIDE AND PARASUICIDE

As previously illustrated, it is quite possible that adolescents who take their own lives and parasuicidal adolescents are representative of two different but overlapping *populations*. In the discussion of the psycho-social factors, this hypothesis has been considered. First, the psycho-social factors related to completed adolescent suicide are discussed. Secondly, the factors related to adolescent parasuicide are reviewed and, finally, this chapter concludes with a discussion of the differences observed between these two groups and other adolescents.

A. Adolescent Suicide

Despite the obstacles associated with studying completed adolescent suicide, Soloman and Boldt (1976) conducted a comprehensive review of youth suicide in Alberta. Although this study was highly descriptive and void of complete background information, these authors have provided relevant information toward the investigation of adolescent suicide.

The study reviewed the youth suicide trends in Alberta between 1968 and 1973. Within this period of time, there were 124 reported cases of adolescent suicide (fifteen years to nineteen years old; 103 males and 21 females). The rates of youth suicide for males and females were 20.9 and 4.4, per 100,000 respectively. For males the most frequent mode

of suicide was firearms (68%), while for females, it was overdose (47.6%). These statistical trends are comparable to the current trends in adolescent suicide.

By utilizing medical records, family information and other available data, Solomon and Boldt investigated the relationship between suicide and demographic variables. Among their principal findings, they suggested that illegal drug abuse, mental and physical health crises and school-related failures are significantly related to adolescent suicide.

The relationship between drug abuse and suicide is consistent with the results of other studies (Wright, 1982; Greuling and DeBlassie, 1980). However, Greuling and DeBlassie (1980) suggest that, although there is such a relationship, "the former is in no way the cause of the latter" (p. 589). They assert that the same factors which lead to drug abuse may also lead to suicide. Thus, with regards to adolescent suicide in Alberta, drug abuse should not necessarily be viewed as a cause, but as a symptom of other factors related to suicide.

Soloman and Boldt's finding that physical and mental illness is correlated with completed adolescent suicide is consistent with the majority of other studies; however, this relationship is not clear (Jacobson and Jacobson, 1972; Jacobs, 1971; Petzel, 1978; Weinberg, 1970). With regard to mental illness, the results have been shown to be inconsistent and confounded by methodological problems.

The relationship between physical illness and adolescent suicide, however, is consistent throughout the literature (Jacobson and Tribe, 1972; Petzel and Cline, 1978; Weinburg, 1970). Weinburg (1970) considered a sex difference in the *sick role* among adolescent suicidal patients. The results suggested that males were suicidal when illness was perceived to be an obstacle to masculine competency. Girls, however, were tolerant of illness when it induced attention from significant others, but not when illness threatened these relationships. Thus, consistent with the findings of Soloman and Boldt, physical illness may be a contributing factor to adolescent suicide.

The relationship between school failure and suicide is not consistent with other research. The majority of investigators have suggested that the suicide rate is lower among students than among non-students (Peck and Schrut, 1971; Senseman, 1969; Lester and Lester, 1971). However, if one were to consider events and circumstances which may be perceived by the adolescent as a significant failure, or as an obstacle to success, the statistics may be interpreted differently. In Solomon and Boldt's study, 9.8% of the males who completed suicide experienced school failure and 13.8% were unemployed. Also, 2.1% were *hustlers*, 1.1% were on welfare and 4.2% were physically disabled. Thus, it could be suggested that 31% of the male adolescents who committed suicide had been confronted with significant difficulties. For females, this percentage would be 57.1%. Such a broad

range of factors have not been formally investigated by other researchers.

In considering the study of Solomon and Boldt, we can conclude that drug abuse, physical illness and significant difficulties are related to suicide. However, this relationship is descriptive rather than causal. Peck (1968), in a study of the histories of adolescent suicides in the Los Angeles area, attempted to describe such relationships in conjunction with other psycho-social factors. He found that the great majority of suicidal males were described as quiet, obedient and often studious but moody persons. Peck suggests that suicidal tendencies were unnoticed due to the notion in our society that a *good boy* is equivalent to a *normal boy*. From the data collected, Peck (1968) found that the highest relationship with suicide was the loss of a loved one. He asserts that this loss takes many forms, and is characterized by a symbiotic dependency held with a parent. By closely examining suicides which were precipitated by a school failure, he determined that the real pressure did not come from the school but from extraordinarily high standards the adolescent had internalized in order to satisfy parental expectations. Failure to the adolescent would mean the loss of love and parental approval, a risk such adolescents could not face.

The family of these adolescent boys were characterized by successful, rigid fathers who encouraged success and "masculinity". Conflict with regards to sexual identity and

the strong parental demands "to be a man" tended to weaken the boy's own sense of identity. The father's weapon was often used in the suicidal act. In conclusion, Peck suggests that adolescent suicide is closely related to issues within the family structure, unresolved dependency needs and a poorly developed tolerance for frustration and anxiety (Peck, 1968).

Japanese social psychologists have also investigated the psycho-social factors related to the increase in adolescent suicide in their country. They propose a suicidal process which may be relevant to adolescent suicide in Alberta, and therefore is briefly reviewed.

Mamoru (1981) found that suicidal adolescents were significantly more socially immature when compared with other adolescents. Their families were characterized by strict and overprotective parents and a lack of intimacy. Manoru concludes that such an environment hinders the adolescent's learning of interpersonal relationship skills, the development of adjustment mechanisms and the flexibility required to be able to succeed within his social milieu. The adolescent enters a dilemma between the wish for dependence and independence. This dilemma produces hostility against the object of dependence (parents) which leads to compulsive self restraint and a narrowing of perception (Mamoru, 1981).

Ishii (1981) relates this process to sociological factors within the Japanese environment. He concludes:

1. In the contemporary affluent society of Japan, adults

tend to seek a "rich life" and the "single minded" way of living has decreased. And so, children can't learn that way of life (proper aggression) and enjoy the "joy of becoming an adult". But proper aggression in itself is neither good nor bad, it is rather natural. Without it man could not have prevailed over nature. If that natural development is impeded, one becomes introverted.

2. The studying and the playing of children has become shallow, neither is their curiosity honed. Rather, they become security oriented due to the excessive inflow of information. Thus, they tend to escape toward the lesser of easy tranformation rather than toward serious self realization.
3. The Japanese society does not have adequate safety valves for hostile feelings. Moreover, some of the politicians are bad examples of "less service to the public" and they gnaw at the youth's proper aggression and foster in them "pusillanimity".

(Ishii, 1981, pp. 54 - 55).

In addition, Ishii (1981) observed that the number of members per nuclear family has recently decreased in Japan to less than two children per household. He suggests that this leads to parents overprotecting their children and thus the frustration tolerance of children is greatly lowered.

In the cases where the youth suffers the loss of one or both parents through death, separation or divorce, the child suffers from anxiety and unresolved dependency needs which

contribute to his inability to establish significant relationships. At adolescence, the gap between the child's prematurely developed body and immature personality becomes even greater (Ishii, 1981).

The most predominant motives of adolescent suicide in Japan are academic success for males and problems with the opposite sex for females. Ishii (1981) observed that, unrecognized by adults, these motives are characteristic of the two most important decisions a person makes in his life. In confronting such decisions, the adolescent lacks the appropriate support and the exposure to appropriate role models due to changes within the family structure and social environments.

Similar sociological and familial changes can be observed within the family and social environments of adolescents in Alberta today. In the past thirty years, Alberta has advanced from being one of Canada's poorest provinces to one of Canada's richest (Hellon and Soloman, 1980). As a result, the social environment has become highly competitive and encourages striving to seek "the rich life". The play of children in our society may also be described as "extremely shallow". It is noted that, by the age of eighteen, the average child in Alberta will have spent more time watching television than attending school (Edmonton Journal, 1978). The average number of children in Alberta's families has dropped from 1.8 in 1971 to an estimated 1.3 in 1981 (Statistics Canada, 1979). Thus, the psycho-social

factors investigated by the Japanese researchers may have some relevance to present day Alberta. As illustrated, these factors have lead to significant changes within the social and family structures of the adolescents.

The psycho-social process, proposed by the Japanese, which precipitates adolescent suicide, is consistent with the process proposed by Peck (1968). In conjunction with the statistical and demographic findings, this suicidal process is characterized by the following factors:

1. Statistical Findings
    a. predominantly a male phenomenon
    b. use of highly lethal methods
    c. high indications of lethal intent
2. Social Environmental Factors
    a. progressively technological and competitive society
    b. excessive inflow of information
    c. lack of adequate safety valves for hostile feelings
3. Family Environmental Factors
    a. the loss of one or both parents
    b. overprotective parent(s)
    c. rigid fathers who encourage success and masculinity
    d. lack of intimacy and communication within the family
4. Individual Factors
    a. significantly immature
    b. perceived pressure towards success and independence
    c. conflict with regards to sexual identity
    d. high self expectations

e. perceived obstacles to masculine competency such as physical illness, failure and problems with the opposite sex
f. poorly developed interpersonal relationship skills
g. poorly developed adjustment mechanisms
h. low tolerence for frustration and anxiety
i. absence of support structures

B. Adolescent Parasuicide

The problems which are inherent in identifying and studying parasuicidal adolescents in Alberta, have hindered research on this phenomenon in our province. Therefore, the literature from other geographical areas has been utilized to elucidate this area of investigation. In doing so, the author has emphasized adolescent parasuicide as being primarily a female phenomenon and the psycho-social factors involved with this phenomenon.

In comparison to the lack of research investigating completed adolescent suicide in North America, there is abundant research investigating adolescent parasuicide. The following is a summary of the statistics, demographic findings and identified psycho-social factors which have been related to adolescent parasuicide.

1. Statistical Findings
   a. primarily a female phenomenon
   b. less lethal methods used

c. indications of the absence of lethal intent

2. Social Environmental Factors
   a. similar to adolescent suicide
3. Family Environmental Factors
   a. loss of one or both parents (Teicher *et al*, 1981; Goldney, 1981)
   b. stresses of competition amongst family members (McArney, 1979)
   c. over-protective parents (Wright, 1982)
   d. poor communication with parents (Hawton *et al*, 1982).
   e. parent-youth conflicts, resulting in the loss of love (Teicher and Margolin, 1968; Peck, 1968).
   f. economic stress in families (Garfinkle *et al*, 1982)
   g. power ridgedly used by family members to discourage separation (Heilling, 1980)
4. Individual Factors
   a. incomplete developmental phase for identity (McArney, 1979)
   b. high achievement expectations (McArney, 1979)
   c. perceives threat of loss of love, due to extreme dependence of child on the parent (Cantor, 1972)
   d. dependant on family for confirmation of identity (Heilling, 1980)
   e. feelings of powerlessness (Farnham and Diggory, 1964); Wenz, 1979a, 1979b)
   f. feelings of helplessness and rage (Cantor, 1972)

g. confronted with significant problems, such as physical illness, pregnancy (Jacobs, 1971)

h. perceives that significant others are insensitive to need for help (Peck, 1968)

i. perceives that a desparate act may change the situation (Cantor, 1972; Peck, 1968)

When compared to the reviewed psycho-social factors of adolescents who complete suicide, the family environments are strikingly similar. However, these two groups differ along three important dimensions. These dimensions are sex, intent, and individual factors such as the perceived outcome of the situation.

While such dimensions may differentiate suicidal from parasuicidal youths, they fail to account for why such adolescents choose suicide or parasuicide as a solution to their problems.

C. Factors Which Differentiate Suicidal And Parasuicidal Adolescents

The factors which have been identified as precipitants to adolescent suicidal and parasuicidal behaviors are not unique to these two groups. Such factors have also been associated with delinquent and disturbed adolescents who do not resort to such behaviors (Stott and Olczak, 1978; Heckel and Mandell 1981 a, b; Haim, 1974). Thus, it is important to consider the factors which may differentiate suicidal and parasuicidal adolescents from adolescents who do not choose

such behaviors. Two such characteristics may be, the comparative isolation of suicidal and parasuicidal youths, and the saliency or "ideation" of these behaviors.

As observed by Haim (1974) the relationship between group membership and adolescent suicide and parasuicide has not been formally investigated. However, he observed that the majority of adolescents who "attempt" or complete suicide can be described as comparatively isolated youths. As stated by Haim (1974),

> In the case of young suicides who do apparently belong to a group, it often turns out that they did not really belong. They have made an attempt, sometimes a great effort to become integrated, but have not succeeded. They feel different from the rest, either because they feel rejected by them or they do not feel within themselves a deep need to take part in group life (p. 127).

Parker (1974) suggests that the comparative isolation of parasuicidal individuals becomes more significant when one considers the frequency of intense dependant relationsips on the part of such individuals. He also proposes that such relationships may be threatened just prior to the parasuicidal act.

Such observations suggest that the lack of integration and comparative isolation of suicidal and parasuicidal adolescents in conjunction with the formulation of dependant relationships are factors which may differentiate such adolescents from other youths.

One intriguing and persistent finding in the literature investigating adolescent suicide and parasuicide, is that a disproportionate number of such youths have a family history

of suicidal behaviors. Jacobs (1971) in a controlled study of parasuicidal adolescents found 35% had friends or relatives who had made a previous suicide attempt. There were no suicide attempts in the histories of the non-parasuicidal control group. Maxman and Tucker (1973) in a study of persistently parasuicidal patients (mean age 22.5) found that 43% had a familial history of completed or attempted suicide. Of 30 completed adolescent suicides in Calgary (1975 - 1979), for which such information was available, 46.6% had a family history of suicidal behavior (Office of the Chief Medical Examiner, 1983).

Although such findings are difficult to interpret, one plausible explanation may be that the previous exposure to suicidal behaviors results in the saliency, or ideation, of suicide and parasuicide as options for the individual who is confronted with significant problems (Murphy and Wetzel, 1982). In support of this explanation, Miller *et al* (1982), found that suicidal ideation was the principal factor which differentiated delinquent suicidal and parasuicidal adolescents, from a control group of delinquent adolescents. However, the relationship between a family history of suicidal behavior and suicidal ideation was not considered.

In conclusion, the relationship between previous exposure to suicide, suicide ideation, and adolescent suicide and parasuicide is extremely ambiguous. However a history of suicidal behaviors amongst relatives or friends and suicide ideation seem to be additional factors which

differentiate suicidal and parasuicidal adolescents from youths who do not resort to such behaviors. It's also suggested that there is a relationship between these two factors. However, such relationships are in need of further investigation.

In light of these findings, it should be noted that society is becoming desensitized to the topic of suicide. The emergence of books and manuals describing philosophical, as well as psychological rationalizations for suicide, and the most effective methods, demonstrates the lessening of taboos associated with the topic (Time, 1983). Within such literature, suicide is described as "self deliverance" rather than a merely self destructive behavior. Such descriptions may enhance the suicide ideation of the vulnerable adolescent who is toying with the notion of suicide.

VI. Theoretical Models For Research

The previously reviewed literature suggests that suicide and parasuicide should not be considered as isolated and impulsive acts, but as the endpoints of two different processes. It is also suggested that such processes are not solely psychological in origin, nor sociological, but the products of an intricate relationship between both psychological and sociological variables. The principal variables have been constructed graphically and are presented in Figure VI.1. However, the relationships between such factors are of central importance to the suicidal and parasuicidal processes. Thus, within the following discussion, these relationships have been given emphasis.

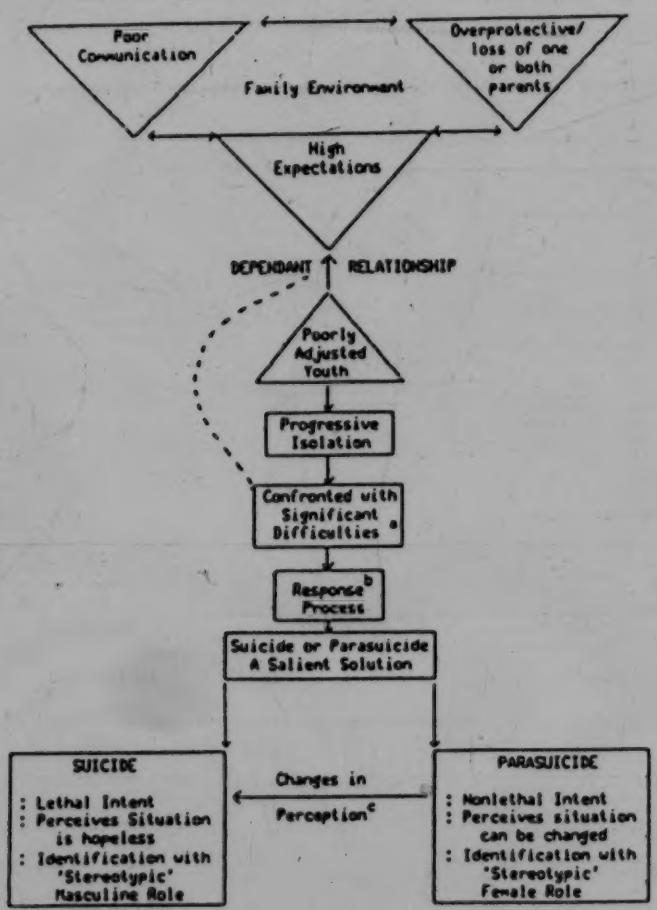
A. Adolescent Suicidal and Parasuicidal Processes

It has been proposed that the environments including the family environments, of suicidal and parasuicidal adolescents are strikingly similar. In the consideration of familial factors, the absence of one or both parents, overprotective parents, high expectations of the adolescent and poor communication amongst family members have been observed. What is then of principal importance, is how such factors interact with the adolescent to precipitate suicidal or parasuicidal behaviors.

As previously noted, the effects of the loss of one or both parents and the excessive overprotectiveness of parents may hinder the normal social and psychological development

FIGURE 1

Theoretical model of the adolescent suicidal and parasuicidal processes



[a] Failure to resolve difficulties may be perceived as a threat to the dependant relationship.

[b] Response Process (Jarvis et al. 1976) consists of "the sequential testing of solutions" (p 152).

[c] Failure to achieve the desired outcome may lead to the perception that the situation is hopeless for parasuicidal adolescents.

of the child (Ishii, 1981; Manoru, 1981; Peck, 1968; McArney, 1979; Heillig, 1980). The Japanese investigators have emphasized that such youths characteristically have poorly developed interpersonal skills, poorly developed coping mechanisms and a low frustration tolerance (Ishii, 1981, Mamoru, 1981). As noted, such immaturity has been observed among both parasuicidal and suicidal adolescents.

Poorly developed interpersonal skills undoubtedly effect the establishment of healthy and balanced relationships. Both suicidal and parasuicidal individuals tend to gravitate toward extremely dependent relationships (Parker, 1974). For suicidal and parasuicidal adolescents, it has been indicated that such dependent relationships are held with one or both parents (Peck, 1968; Cantor, 1964; Heillig, 1980). When one considers that such families characteristically lack intimacy and communication amongst family members (Mamoru, 1981; Hawton *et al*, 1982), while at the same time maintain high expectations of such youths (Peck, 1968, Barter, 1968; McArney, 1979), the adolescent may be placed in a vulnerable position. Such adolescents tend to internalize the high expectations of the parents and perceive that failure, or the general inability to live up to such expectations may result in the loss of parental love (Peck, 1968; Cantor, 1972).

While such dynamics are present in the familial environments, the immaturity of such youths may additionally hinder the establishment of significant relationships

outside of the home. Suicidal and parasuicidal adolescents are comparatively isolated youths who attempt, but usually fail to integrate themselves into groups (Haim, 1974) or to maintain balanced relationships with significant others (Peck, 1968; Parker, 1974). Thus, the suicidal and parasuicidal adolescent usually lacks alternative support structures. It is therefore observed, that if such youths are confronted with a significant problem such as failure, a health crisis, or a pregnancy, they may have few resources, both personal and interpersonal, to aid them in resolving such difficulties

The adolescent may enter a "response process" (Jarvis *et al*, 1976) which "may be viewed as a testing of solutions" (p. 152). As noted by Jacobs (1971) parasuicidal adolescents will first engage in rebelliousness to resolve their difficulties. However, it is interesting to note that physical withdrawal, such as running away from home, was not considered by parasuicidal adolescents, while it was felt to be a viable option by the non-parasuicidal control group.

In addition, most parasuicidal individuals have been observed to seek help in socially acceptable ways (Jarvis, *et al*, 1976). In a study of fifty parasuicidal adolescents (aged 15 to 18), Hawton *et al* reported that 24% had visited their general practitioner in the previous week and 50% during the previous month. However, only two of the adolescents who visited their practitioners reported discussing their problems, while five were prescribed

psychotropic drugs. An additional 24% had seen a social worker one month before the parasuicidal act.

These results are comparable to the findings of Solomon and Boldt (1976) in their investigation of completed youth suicide in Alberta. They estimated that 22.6% of the males and 48.0% of the females for which there was information available, visited a physician or psychiatrist within two weeks of the fatal act. It was not reported how many of these youths discussed their problems during such visits. Such findings suggest, however, that their efforts to seek professional help did not result in the resolution of their difficulties.

When such alternatives have failed, the adolescent may perceive the situation as completely hopeless or that a desparate act may change the situation and force the attention of significant others upon the youth's problems. For suicidal and parasuicidal adolescents, it has been suggested that the previous exposure to suicide and/or suicidal ideation may render suicide and parasuicide as salient solutions to their present difficulties. However, in considering such behaviors, suicidal and parasuicidal adolescents differ along three important dimensions: (1) intent, (2) individual factors, such as the perceived outcome of the situation, and (3) sex.

As previously noted, the lethal intent of the adolescent who completes suicide is clearly suggested by the methods used. However, the intent of parasuicidal

adolescents is ambiguous and unclear. Jacobziner (1960)and Jacobs and Teicher (1967) interpreted the meaning of adolescent parasuicide as an effort to re-establish a close, dependent relationship with a loved one, or as an attempt to change that person's behavior. Cantor (1972) describes adolescent parasuicide as a desperate attempt to regain contact with a lost gratifying parent. Peck (1968) described the intention of the parasuicidal adolescent as a means of communication to significant others and an attempt to focus their attention on a hidden problem.

Parker (1981), by constructing a repertory grid, found significant differences in the perceived meaning of taking an overdose between high intent and low intent suicidal subjects. For the subjects with lethal intentions, the meaning of taking an overdose was most closely related to the suicide act itself. In addition, suicide attempts were seen as primarily the communication of needs, expression of feelings and an escape from tension. This suicidal intent group viewed the reconciliation with the significant person as being hopeless. Such interaction would only result in tension and denial of the real problem. The seeking of professional help was regarded as a difficult choice and may result in "blaming the other" (Parker, 1981, p. 311). Thus, the high intent motives were characterized by a narrow view of alternative solutions and support structures. The reconciliation with the key person was seen as being hopeless (Parker, 1981).

In contrast, the low intent group placed the meaning of taking an overdose closest to "being alone and crying" and "getting drunk". Suicide itself was seen as a harmful act involving denial of the personal problem and the suppression of feelings. This group placed taking an overdose second only to "getting drunk" in terms of their ratings of perceived ease of action. This group also saw the verbal resolution of problems with the key person in a positive light. However, this was viewed as a difficult solution. The possibility of seeking professional help was seen as a *helpful* and *sensible* solution (Parker, 1981).

The results of these studies clearly indicate that intent and identification with significant others are important factors which separate adolescent suicide and parasuicide. However, such factors do not account for the dramatic sex difference between these two groups. The factors which may account for this sex difference have been addressed from a psycho-social perspective.

As reviewed by Neuringer and Lettieri (1982), various hypotheses have been proposed to explain the sex differences in suicidal and parasuicidal behaviors. Durkheim (1951) suggested that women basically lacked the imagination required to commit suicide. Davis (1904) proposed that fewer women commit suicide due to their stronger religious faith. Maris (1969) and Lester (1972) suggested that as women use less violent means, they survive the suicidal attempt more often than men. Diggory and Rothman (1961) proposed that as

women are more vain than men, they tend to use less disfiguring means, and thus have a higher survival rate (as cited in Neuringer and Lettieri, 1982).

As noted by Neuringer and Lettieri, other than the suggestion that the sex differences in suicidal and parasuicidal trends are due to the failure of women to successfully commmit suicide, there are few explanations for the observed sex differences. However, these researchers suggest that sex related, social expectations may be the most acceptable explanations for such differences.

> Women have more resources than men for confessing their emotional difficulties. Men are expected to be strong, stolid, and not to publically express their weaknesses. Women have covert approval to declare and display their perturbations and suicidal display is one of these socially sanctioned emotional outlets for disturbed women. In our society dramatical and "hysterical" gestures and emotional displays are more acceptable in women than in men. It may be that suicidal gestures are an expected, and even socially sanctioned, behavior in unhappy women. Their attempts certainly receive less disapproval than similar behavior in men.... (p. 22).

In considering sex roles, John J. Mitchell (1983), described the double edged dilemma induced by male sex role expectations. Western societies tend to encourage males to internalize 'masculine' characteristics such as independence, individualism, decisiveness, a preference toward action, and to a point, aggressiveness. Mitchell proposed that while investigators tend to look for deficiencies in explaining suicidal behaviors, the internalization of such 'positive' attributes may contribute to the higher rates of male suicide, as well as the male

predominance in other acts of violence. Neuringer and Lettieri (1982) additionally caution that as women continue to be encouraged to internalize role expectations similar to men, the rates of suicide for females could increase.

It has been suggested that both suicidal and parasuicidal adolescents struggle to obtain a sexual identity (Peck, 1968; Heilling, 1980). Thus for these adolescents, the identification with such stereotypic sex roles may be more pronounced.

For adolescent suicidal males, the pressure to assume an identity with these characteristics, is not only applied by society, but by his parents and himself (Peck, 1968). As reviewed, such adolescents lack maturity, coping mechanisms, support structures and appropriate channels where they may relieve their frustrations. When confronted with a problem which threatens his weak hold on "masculinity", such as a significant failure or physical illness, he may resort to suicide as a drastic means of escape. The end product of this process can be illustrated by the case of a father who admonished his nineteen year old son, "If you can't cut it in this world, you might as well take a gun to your head". The son followed his father's suggestion and used his father's gun (Peck, 1968).

In contrast, the female adolescent is confronted with different expectations. She is allowed to be dependent, emotional, and at times, manipulative. When confronted with a significant problem, the female adolescent is less

pressured to handle it on her own but is encouraged to seek help. As illustrated, the parasuicidal adolescent's family is characterized by poor communication, overprotective parents and the perception of the adolescent that such significant others are insensitive to her need for help. Parasuicidal behavior often represents an attempt to break open the closed lines of communication and focus the attention of significant others on the adolescent. It is interesting to note that the highest rate of female suicide occurs between the ages of 25 years and 29 years (Solomon and Boldt, 1976). Perhaps a process similar to that described for adolescent males, occurs for females at this age.

The increasing rate of adolescent suicide and parasuicide may be partially explained as a symptom of a rapidly changing technological society. The reduced social play of youths, increased competitiveness in the schools, increased transition of families, increasing divorce rate, and the excessive inflow of information are just a few of the factors which may enhance the suicidal and parasuicidal processes. In addition, as suggested by Neuringer and Lettieri (1982), parasuicide is perhaps becoming a socially sanctioned behavior for the emotional and distressed female. Adolescent girls may be especially susceptible to the identification with such roles.

It is important to consider the proposed suicidal and parasuicidal processes as a preliminary effort to organize

the existent literature investigating suicidal and parasuicidal adolescents into a theoretical formulation. The principal significance of this model is the proposition that there are identifiable differences between the adolescent suicidal process and the adolescent parasuicidal process. Such differences have important therapeutic implications which are now addressed.

B. Therapeutic Implications Of The Model

Before the interventions of suicidal or parasuicidal individuals may occur, such individuals must first be identified as being in need of help. It is interesting to note, that of the parasuicidal adolescents studied by Hawton *et al* (1982) , 74% were in contact with a helping professional during the month previous to the parasuicidal act. Solomon and Boldt (1976) estimated that of the youths who completed suicide (for which such information was available), 22.6% of the males and 48.0% of the females visited a physician or a psychiatrist within two weeks previous to the completed suicide. As stated by Solomon and Boldt:

> It could be argued that nearly 75% of the males and nearly one-half of the females had not visited a physician before their suicides and that doctors cannot be held responsible for those whom they do not see, but what about the seventy-four suicides committed by those between the ages of fifteen and twenty-nine who did visit their doctors shortly before their final act? Could their lives have been saved by physicians better trained to recognize suicidal clues? Certainly not all of these lives could have been saved, but many might have been.

In considering the professional agencies in Alberta, which additionally treat suicidal and parasuicidal clients, it is alarming to consider that few employ workers trained to deal with such individuals (Boldt, 1976). As presented in the Report of the Task Force on Suicide (Boldt, 1976); "Of the 143 agencies providing codable responses, 131 (91.6%) reported that they had no workers with significant training in dealing with suicidal clients..." (p. 300).

Such findings clearly indicate that individuals employed in the helping professions need to be trained to recognize the symptomatology of suicide and parasuicide and to effectively deal with such clients. Until professionals are at least sufficiently competent to identify such individuals, the construction of effective therapeutic strategies will have little significance.

Once it is suspected that an adolescent may engage in self injurious behaviors, it is necessary to determine if such behaviors may be suicidal or parasuicidal, in order to select the appropriate intervention strategy. It has been suggested that the three dimensions which may differentiate the suicidal from the parasuicidal adolescent are intent, the adolescent's perceptions of the situation and sex.

Although the sex of a youth may be easily determined, the intent and perceptions of the adolescent are not easily assessed. However, a noteworthy number of scales have been constructed to assess both of these dimensions. Such scales may aid the helping professional in the assessment of the

potential suicidal or parasuicidal adolescent.

The Miskimins Scale (Miskimins *et al*, 1967) and the Los Angeles Prediction Scale (Litman and Farberow, 1961), are rating scales which utilize information obtained during an initial interview to aid in the assessment of the likelihood of suicidal or parasuicidal behaviors. The Suicide Intent Scale, (Beck *et al*, 1974) is a rating scale which is employed immediately following self injurious behavior to assess the suicidal or parasuicidal intentions of the client. Such scales have shown potential in the assessment of suicidal and parasuicidal individuals (Lester, 1974; Beck *et al*, 1974).

In addition to the use of formal scales, the carefully constructed interview which investigates the client's perceptions of the present situation, perceptions of the future, the existence of support structures, the existence of previous attempts and the formulation of a suicidal plan, may give extremely valuable information (Lister and Farberow, 1961).

Intervention Strategies

The notion that suicide and parasuicide are the end products of two different processes suggests the construction of two different intervention strategies.

Suicidal Intervention

The suicidal adolescent should be considered as an individual in need of long term intensive therapy.

Hospitalization or institutionalization may be required. Therapy should focus upon the establishment or reestablishment of significant relationships and modifications of the adolescent's perceptions of himself and his present and future situations. The therapeutic relationship may be of central importance during the initial stages of therapy. The client's progress should be carefully evaluated. As stated by Solomon and Boldt (1976)

> Workers in hospitals, especially mental hospitals and psychiatric wards of general hospitals, should be alerted to the dangers of too rapid improvement in their patients, particularly patients admitted for suicide attempts. Between 1968 and 1973, fifty-one Alberta youths (thirty-four males and seventeen females) who were either in mental hospitals or had been released from them, killed themselves. Many of these people killed themselves soon after release. Adequate follow-up, especially in the three months to one year period, following release, is called for (p. 28).

Once it is determined that the adolescent is no longer in immediate danger, therapy should be continued to maintain initial gains and to help alleviate the precipitant dynamics of the suicidal process. The long term goals of therapy may include; the improvement of interpersonal relationship skills, the improvement of problem solving skills and family therapy.

Parasuicidal Intervention

Although parasuicidal behavior may be considered as "manipulative" and "attention-getting", it should also be considered as a desparate cry for help. The attitude held by a significant proportion of adults, that such behaviors are best ignored (Haim, 1974), is irresponsible in the most

literal sense of the word. The parasuicidal individual needs to receive attention, however, it should be recognized that such individuals are asking for the attention of an identified significant other. In the case of parasuicidal adolescents, the significant other is most likely to be one or both parents (Peck, 1968; Heilling, 1980). For this reason, the therapeutic intervention of the parasuicidal adolescent should be centered around the family. The goals of therapy may include opening lines of communication between family members, the establishment of balanced relationships, and the evaluation and perhaps modification of family systems.

Individual therapy may also be required to aid the adolescent in the establishment of successful relationships and support structures outside of the home. However, it should be remembered that the principal objective of the intervention and/or postvention, is to ensure that the adolescent's desparate cry for help is recognized by the individual(s) to whom the cry was intended.

C. Summary And Conclusions

The impetus behind this thesis was primarily derived from the author's own experiences with institutionalized suicidal and parasuicidal adolescents. Within this population, differences were observed between adolescents who in time "attempted suicide" and the adolescents who went on to complete suicide. In an effort to investigate such

differences, the author has considered the conventional theories of suicide and the body of literature which has investigated suicidal and parasuicidal behaviors amongst adolescents. In recognition that the dynamics of suicide and parasuicide differ amongst populations, cultures, age groups and time periods, such literature has been additionally evaluated to assess its relevance to the current suicidal and parasuicidal trends in Alberta.

However, research in the area of adolescent suicide and parasuicide has been confounded by methodological problems. The most significant of such problems include the utilization of improper sampling techniques, control techniques and the limitations imposed by retrospective data collection. In addition, researchers have failed to consider that differences between suicidal and parasuicidal adolescents may exist. The majority of such studies are based upon samples which are predominantly female, fail to consider the intent of such adolescents and assert that the results of such studies are generalizable to suicidal youths. As adolescent suicide is primarily a male phenomenon and such males have demonstrable lethal intentions, such methodologies are extremely questionable.

The author has organized such research into two different categories, studies which investigated adolescent suicide and investigations of adolescent parasuicide. However, once the literature was categorized along these two dimensions, the investigations of adolescent suicidal

behavior were extremely limited, thus imposing a major limitation to this thesis.

The statistics reviewed suggested two major differences between suicidal and parasuicidal adolescents. These differences were (1) sex, and (2) the methods employed in conjunction with such behaviors. Adolescents who completed suicide were predominantly male and utilized extremely lethal methods. In comparison, parasuicidal adolescents were predominently female and used less lethal means. These findings suggested differences between the intentions of suicidal and parasuicidal adolescents.

Conventional theories of suicide have emphasized two major perspectives; the psychological and the sociological. The psychological approaches have focused upon one principle cause of suicide; the existence of major or minor idiosyncratic disorders amongst suicidal individuals. The sociological approaches have focused upon the social environment as the principal precipitant to suicidal behaviors. However, neither approach in its sole application accounts for the occurrence of adolescent suicide and parasuicide, nor sufficiently differentiates between these two behaviors.

Through a review of the literature which has investigated the psycho-social dynamics of adolescent suicide and parasuicide, the significant sociological and psychological factors which were reported to facilitate such behaviors were identified. These factors were then organized

into a theoretical model which illustrates the formulated suicidal and parasuicidal processes. Although *post factum* in its construction, this model may be useful in the generating of hypotheses for future investigations.

Recommendations For Future Research

Before investigations of adolescent suicide and parasuicide may yield conclusive results, the sampling techniques, control techniques, methodologies employed by researchers and the recording systems of retrospective data in Alberta, must be improved.

Sampling Techniques

In the investigation of any phenomenon, in order for results to be generalizeable to a specific population, the sample employed must be representative of that population. Of the literature reviewed investigating adolescent suicide and parasuicide, not a single study has utilized a representative sample. In addition, researchers have failed to clearly define the sample under investigation and to report the limited generalizeability of the subsequent results.

As previously noted, terms used to describe such samples, which include parasuicide, suicidal gestures, self injury, and attempted suicide, have been employed interchangeably by investigators who refrain from precisely defining such terms. Such sampling and reporting procedures must be improved.

In the investigation of suicidal and/or parasuicidal adolescents, in addition to hospitals and institutions, professional agencies, private physicians, and schools should be considered, and appropriate sampling techniques utilized, in order to provide a representative sample. If such procedures are not employed, researchers should clearly define the sample under investigation, and describe the subsequent limited generalizeability of the results.

Control Techniques

Only one study reviewed utilized an adequate control sample (Jacobs, 1971). The problems inherent in the obtaining of such samples is a major obstacle to investigators. However, as demonstrated by Jacobs (1971) such obstacles may be overcome through patience and persistence. As the inclusion of adequate control techniques are necessary to determine the relative significance of the subsequent results, the time and effort required to obtain such samples should be considered as worthwhile investments.

Methodologies

The vast majority of the studies investigating suicidal and parasuicidal adolescents have been descriptive in nature. Such studies may identify factors which are illustrative of such youths, however they fail to explain the relationships and the relevance of these factors to adolescent suicide and parasuicide. The understanding of such relationships is vital in the construction of effective prevention, intervention and postvention strategies.

However, in the investigation of the significance and relevance of such relationships, it is necessary to employ more complex methodologies and statistical analysis techniques.

Recording Systems Of Retrospective Data

In Alberta, there are major obstacles to the retrospective study of adolescent suicide and parasuicide. While the information collected on reported suicides is incomplete, the information collected on parasuicidal individuals is virtually non-existent.

Presently the Office of the Chief Medical Examiner (1983), is constructing a computerized data system to aid in the collection and organization of information on completed suicides. Such a data base may greatly improve the quality and quantity of information available to researchers.

However, it is alarming to consider that of the agencies reviewed by the Task Force on Suicide (Boldt, 1976), 81.8% did not identify suicidal clients as such in their files. It is recommended that such recording systems be improved, not only for the sake of research, but more importantly because such information may be utilized to serve the needs of the respective client upon referral to another therapist, agency, or upon hospitalization.

The proposed suicidal and parasuicidal processes generate additional suggestions for future investigations. The following paragraphs address the principal areas which may be considered by researchers.

The relationship between the familial environment and adolescent suicide and parasuicide is ambiguous and ill-defined. Dimensions such as the interpersonal relationships between specific family members, the communication systems within the family, differences between suicidal or parasuicidal youths and their siblings, and the relationships of such factors to the suicidal and parasuicidal processes, should be considered for future research.

The development or lack of development of interpersonal relationship skills, coping mechanisms and styles, and problem solving skills of suicidal and parasuicidal adolescents, in comparison with other youths, should be investigated. In addition, the relationship of familial factors to the development of such skills, should be considered.

The factors which contribute to the progressive isolation of suicidal and parasuicidal adolescents are in need of further investigation. Jacobs (1971) proposed that the isolation of such youths is primarily due to the disruption of significant relationships. Haim (1974) proposed that suicidal and parasuicidal adolescents may lack the necessary skills, or the desire, to integrate themselves into groups. It may also be that such youths choose to isolate themselves in an attempt to cope with their present situation. The investigation of the relationship of these factors to adolescent suicide and parasuicide may have

important therapeutic implications.

As previously suggested, the relationships between a history of suicidal and parasuicidal behaviors among relatives or friends, suicidal ideation, and adolescent suicide and parasuicide, are in need of further investigation. Such studies may unravel the cognitive component of adolescent suicide and parasuicide.

The proposed differences between suicidal adolescents and parasuicidal adolescents should be deductively and empirically evaluated. Relationships between methods employed, intentions, the identification with sex roles and adolescent suicide and parasuicide should be investigated. In addition, to the proposed differences, other dimensions which may differentiate suicidal from parasuicidal behaviors should be considered. Such dimensions may include: parental role models, problem solving skills, self-other perceptions, locus of control, and the acceptance of aggressive behaviors.

References

Adler A. Preface- The symposium on suicide. In P. Friedman (ed.), On Suicide, New York: International Universities Press, 1967.

Adler, A. Problems of Neuroses, London: Routledge and Kegan Paul Ltd., 1929.

Adler, A. Suicide. Journal of Individual Psychology , 1958, 14, 57-61.

Ansbacher, H. Suicide: The Adlerian point of view. In N. Farberow (ed.), The Cry For Help, New York: McGraw Hill, 1961.

Anthony, J. and Scott, P. Manic-depressive psychosis in childhood. In A. Haim (Ed.), Adolescent Suicide. New York: International University Press, 1970.

Balsen, B. II & Masterson, J. F. Suicide in adolescents, American Journal of Psychiatry. 1959, 116, 400-404.

Balswich J. K. and Balswich J. Where have all the alienated students gone. Adolescents, 15, 1980, 691-697.

Bancroft, J., Hawton, K., Simkin, B., Cumming, C., and Whitwell, D. The reasons people give for taking overdoses: A further inquiry. British Journal of Medical Psychology. 1979, 52(4), 353-365.

Barter, J. T., Swaback, D. O., and Todd, D. Adolescent suicide attempts, a followup study of hospitalized patients. Archives of General Psychiatry, 1968, 19, 523-527.

Beck, A. T., Schuyler, D. and Herman, I. Development of suicidal intent scales. In A. Beck, H. Resnik and D, Lettieri (eds.), The Prediction of Suicide, Maryland: Charles Press Publishers, 1974.

Birtchnell, J. The relationship between attempted suicide, depression and parent death. British Journal of Psychiatry, 1970, 116, 307-813.

Boldt, M. Report of the Task Force or Suicides to the Minister of Social Services and Community Health. Alberta Social Services and Community Health, 1976.

Bourne, P. G. Suicide among the Chinese in San Francisco. American Journal of Public Health. 1973, 63, 744-750.

Cantor, P. The adolescent attempter: sex sibling position

and family constellation. Life Threatening Behavior. 1972, 2(4), 252-261.

Carmen, J. and Blaine, A. A study of suicide attempts by male and female university students. International Psychiatric Clinics. 1970, 7, 181-199.

Connell, H. M. Attempted suicide in school children. Medical Journal of Australia. 1972, 1, 686-690.

Crook, T. and Raskin, A. Association of childhood parental loss with attempted suicide and depression. Journal of Consulting and Clinical Psychology, 1975, 43, 277.

Crumby, F. E. The adolescent suicide attempt: a cardinal symptom of a serious psychiatric disorder. American Journal of Psychotherapy, 1982, 36(2), 158-165.

Davis, J. C. Suicide with some illustrative cases. Journal of the American Medical Association, 1904, 43, 121-123.

Diagnostic and Statistical Manual of Mental Disorders, (Vol 3), 1980.

Diggory, J. C. and Rothman D. Values destroyed by death. Journal of Abnormal and Social Psychology, 1961, 63, 205-210.

Durkheim, E. Suicide. (transl.) London: Routledge and Kegan Paul, 1952.

Edmonton Journal. August 22, 1978. In J. Dewall (ed.), What You Should Know About Alberta's Children and Their Families...the darker side. Alberta Social Services and Community Health, 1982.

Erikson, E. Identity, Youth and Crisis. New York: W. W. Norton and Company, 1968.

Erikson, E. Identity and the Life Cycle,(2nd ed.). New York: W. W. Norton and Company, 1980.

Farberow, N. L. Cultural history of suicide. In J. Waldenstrom, T. Larson and N. Ljunstedt (Eds.). Suicide and Attempted Suicide. Stockholm: Nordiska Bokhandelns Forlag, 1972.

Farnham, H. and Diggory, S. Self evaluation and subjective life expectancy among suicidal and nonsuicidal psychotic males. Journal of Abnormal and Social Psychology. 1964, 69, 623-634.

Friedman, P. On Suicide. New York: International Universities Press, 1967.

Freud, S. Beyond the Pleasure Principle. London: Hogarth Press, Ltd. 1950.

Freud, S. Mourning and melancholia. In Standard Edition, Vol. 18. London: Hogarth Press Ltd., 1955.

Futterman, S. Suicide: The psychoanalytic point of view. In N. Farberow (ed.), The Cry for Help , New York: McGraw Hill, 1961.

Garfinkel, B. D., Proese, A. and Hood, J. Suicide attempts in children and adolescents. American Journal of Psychiatry, 1982, 139(10), 1257-1261.

Gibbs, J. P. Suicide. New York: Harper & Row, 1968.

Glaser, K. 1981. Psychopathologic patterns in depressed adolescents. American Journal of Psychotherapy, 35(3), 368-382.

Goldberg, E. L. Depression and suicide ideation in the young adult. American Journal of Psychiatry, 1981, 138(1), 35-40.

Goldney, R. D. Are young women who attempt suicide hysterical? British Journal of Psychiatry, 1981, 138,

141-146.

Goldney, R. D. Attempted suicide in young women: Correlates of lethality. British Journal of Psychiatry, 1981, 139, 382-390.

Goldney, R. D. Parental loss and reported childhood stress in young women who attempt suicide. Acta Psychiatrica Scandinavica, 1981, 64(1) 34-49.

Greuling, J. W. and DeBlassie, R. R. Adolescent suicide. Adolescence. 1980, 15(59), 589-601.

Green, M. Suicide: The Sullivanian point of view. In N. Farberow (ed.), The Cry For Help, New York: McGraw Hill, 1961.

Guze, S. B. and Robins, E. 1976. Suicide and primary affective disorders. British Journal of Psychiatry, 117, 437-438.

Haider, I. Suicidal attempts in children and adolescents. British Journal of Psychiatry. 1968, 114; 1113-1134.

Haim, A. Adolescent Suicide. London: Tavistock, 1974.

Hawton, K., O'Grady, J., Osborn, M. and Cole, D. Adolescence

who take overdoses: their characteristics, problems and contacts with helping agencies. British Journal of Psychiatry, 1982, 140, 118-123.

Heilling, R. Adolescent suicidal behaviors: A family systems perspective. Dissertation Abstracts International, 1980, 40(12-b), 5813.

Hellon, C. and Solomon, M. Suicide and age in Alberta, Canada, 1951 to 1977. Archives of General Psychiatry, 1980, 37, 505-510.

Hendin, H. 1961. Suicide: Psychoanalytic point of view in N. Farberow (Ed.), The Cry for Help, New York: McGraw Hill, 1961.

Holinger, P. C. Adolescent suicide: An epidemiological study of recent trends. Journal of Psychiatry, 1978, 135, 754-756.

Ishii, K. Adolescent self destructive behavior and crisis intervention in Japan. Suicide and Life Threatening Behavior, 1981, 11(1), 51-61.

Jacobs, J. Adolescent Suicide. New York: Wiley, 1971.

Jacobs, J. and Teicher, J. Broken homes and social isolation

in attempted suicide of adolescents. International Journal of Social Psychiatry, 1967, 13, 139-49.

Jacobson, S. and Jacobson, D. M. Suicide in Brighton. British Journal of Psychiatry. 1972, 121, 369-377.

Jacobson, S. and Tribe, P. Deliberate self injury (attempted suicide) in patients admitted to hospitals in Sussex. British Journal of Psychiatry. 1972, 121, 379-386.

Jacobziner, H. Attempted suicides in children. Journal of Pediatrics. 1960, 56, 519-525.

Jarvis, G. K. and Boldt, M. Suicide in the later years. Essence, 1980, 4(3), 145-158.

Jarvis, G. K., Ferrence, R. G., Johnson, G. F. and Whitehead, P. C. Sex and age patterns in self injury, Journal of Health and Social Behavior. 1976, 17, 146-155.

Kenninston, K. The Uncommitted Alienated Youth in American Society. New York:Dell, 1965.

Kenninston, K. The Young Radicals. New York: Harcourt Brace Jovanovich, 1968.

Leon, C. A., Perdom, R., Martinez, F, and Caffrey, B. Psychological characteristics of frustrated suicides. Social Psychiatry. 1972, 7, 82-89.

Lesse, S. M. Suicide behavior in twenty adolescents. British Journal of Psychiatry. 1969, 115, 479-480.

Lester, D. Why People Kill Themselves. Illinois: C. C. Thomas, 1972.

Lester D. Demographic versus clinical predictions of suicidal behaviors. In A. Beck, H. Resnik, and D. Lettieri (Eds.), The Prediction of Suicide , Maryland: Charles Press, 1974.

Lester, G. and Lester, D. Suicide: The Gamble With Death. New Jersey: Prentice-Hall, 1971.

Litman, R. E. and Farberow, N. L. Emergency evaluation of self destructive potentiality. In N. Farberow and E. Shneidman, The Cry For Help, New York: McGraw Hill, 1961.

Mamoru, I. Suicide of Japanese Youth. Suicide and Life-Threatening Behavior. 1981, 11(1), 17-30.

Maris, R. Social Forces in Urban Suicide. Illinois: Dorsey

Press, 1969.

Maxman, J. S. and Tucker, G.J. No exits: the persistently suicidal patient. Comprehensive Psychiatry, 1973, 14, 71-79.

McAnarney, E. R. Adolescent and young adult suicide in the U.S.: A reflection of social unrest? Adolescence. 1979, 14(56), 765-774.

McIntire, M. S. and Angle, C. R. Is the poisoning an accident? An ever present question beyond the early childhood years. Clinical Pediatrics. 1971, 10, 414-417.

McIntire M. S. and Angle, C. R. Suicide Attempts in Children and Youth. New York: Harper and Row, 1980.

Menninger, K. A. Psychoanalytics of suicide. International Journal of Psychoanlysis, 1933, 14, 376-382.

Miller M., Chiles J. and Barnes, V. Suicide attempts within a delinquent population. Journal of Consulting and Clinical Psychology, 50(4), 491-498.

Mintz, R. S. Prevalence of persons in the city of Los Angeles that have attempted suicide: a pilot study. Bulletin of Suicidology. 1970, 7, 9-16.

Miskimins, W., Cook, R. D., Wilson, I. T. and Maley R. F. Prediction of suicide in a psychiatric hospital. Journal of Clinical Psychology, 1967, 23, 196-301.

Mitchell, J. J. The Adolescent Predicament. Toronto: Holt Rinehart and Winston of Canada Ltd., 1975.

Mitchell, J. J. Personal Consultation. June 23, 1983.

Monte, C. Beneath the Mask. New York: Holt Renfrew and Winston, 1977.

Morgan, H. G., Burns-Cox, C. J., Pocock, H., and Pottle, S. Deliberate self harm: clinical and socio-economic charactersitics of 368 patients. British Journal of Psychiatry. 1975, 127, 564-574.

Murphy, G. E. and Wetzel, R. D. Family history of suicidal behavior among suicide attempts. Journal of Nervous and Mental Disease, 1982, February, 170(2), 86-90.

Noam, G., Higgins, R., Goethrals, G. Psychoanalytic approaches to developmental psychology. In B. Wolman (ed.), The Handbook of Developmental Psychology, New Jersey: Prentice Hall, 1982.

Nuringer, C. and Lettieri, J. Suicidal Women: Their Thinking and Feeling Patterns. New York: Gardner, 1982.

Office of the Chief Medical Examiner, Alberta Attorney General, 1983, Calgary, Alberta.

Orrell, Pat. Personal Consultation. March 3, 1983.

Parker, A. Suicide Among Young Adults New York: Exposition Press, 1974.

Parker, A. The meaning of attempted suicide to young parasuicides. A repertory grid study. British Journal of Psychiatry, 1981, 139, 306-312.

Patel, N. S. A study of suicide. Medicine Science and Law, 1974, 14, 129-136.

Peck, M. Suicide motivations in adolescence. Adolescence. 1968, 3(9), 109-1189.

Peck, M. and Schrut, A. Suicidal behavior among college students. HSMHA Health Reports. 1971, 86, 149-156.

Petzel, S. V. and Cline, D. W. Adolescent suicide: Epidemiological and biological aspects. Adolescent Psychiatry, 1978, 6, 239-266.

Pokorny, A. 1964. Suicide rates in various psychiatric disorders. Journal of Nervous and Mental Diseases, 139, 499-506.

Preffer, C. R. The family system of suicidal children. American Journal of Psychotherapy. 1981, 35(3), 330-341.

Senseman, L. A. Attempted suicide in adolescents, a suicide prevention centre in Rhode Island is urgently needed. Rhode Island Medical Journal, 1969, 52, 449-451.

Shneidman, E. (ed.). On the Nature of Suicide. London: Josey-Bass, 1969.

Shneidman, E. and Farberow N. L. Clues to Suicide. New York: McGraw-Hill, 1957.

Sifneos, P. E. Manipulative suicide. Psychiatric Quarterly, 1966, 40, 525.

Simpson, Cynthia A., and Porter, Garry L. Self-mutilation in Children and Adolescents. Bulletin of the Menninger Clinic, 1981, 45(5), 428-438.

Soloman, M. and Boldt, M. Interim Report on Suicide Phase One: Youth Suicide. Department of Social Services and

Community Health, Province of Alberta, 1976.

Soloman, M. and Hellon, P. Suicide and age in Alberta Canada. Archives of General Psychiatry. 1980, 37, 511-513.

Statistics Canada, Catalogue 84-205, 1979.

Statistics Canada, Catalogue 91-518, 1982.

Stengel, E. Suicide and Attempted Suicide. Great Britain: Penguin Books, 1964.

Stott, M. and Olczac, P. Relating personality to juvenile offence categories: differences between status offenders and juvenile delinquents. Journal of Clinical Psychology, 1978, 34, 80-84.

Sullivan, H. S. Clinical Studies in Psychiatry. New York: W. W. Norton and Company, Inc., 1956.

Sullivan, H. S. Interpersonal Theory of Psychiatry, New York: W. W. Norton and Company, Inc., 1953.

Teicher, J. A solution to the chronic problem of living: adolescent attempted suicide. In J. Schooler (Ed.), Current Issues in Adolescent Psychiatry. New York:

Brunner Mazel Inc., 1973.

Teicher, J., and Margolin, N. Thirteen adolescent male suicide attempts. Journal of The American Academy of Child Psychiatry. 1968, 7, 269-315.

Time Magazine. Going gentle into the good night. March 21, 1983, p. 81.

Tishler, C. L., McKenry, P. C., and Morgan, K. C. Adolescent suicide attempts: some significant factors. Suicide and Life Threatening Behavior. 1981, 11(2), 86-92.

Trautman, E. C. The suicidal fit. Archives of General Psychiatry, 1971, 119, 515.

Tuckman, J. and Cannon, H. E. Attempted suicide in adolescents. American Journal of Psychiatry. 1962, 118, 719-724.

Weinberg, S. Suicidal intent in adolescence: a hypothesis about the role of physical illness. Journal of Pediatrics. 1970, 77, 579-586.

Weissman, M. M. The epidemiology of suicide attempts, 1960-1971. Archives of General Psychiatry, 1974, 30, 737-745.

Weissman, M. M., Paykez, E. S., French, N., Mark, H., Fox, K., and Prusaff, B. Suicide attempts in an urban community, 1955 and 1970. Social Psychiatry. 1973, 8, 82-91.

Wenz, F. V. Sociological correlates of alienation among adolescent suicide attempts. Adolescence. 1979(a), 14(53), 19-30.

Wenz, F. V. Self-injury behavior, economic status and the family anomic syndrome among adolescents. Adolescence. 19679(b), 14(54), 387-398.

Whitehead, P. C., Johnson, G., and Ferrence, R. G. Measuring of self injury: some methodological and design considerations. American Journal of Orthopsychiatry. 1973, 43, 142-8.

Wright, L. S. Parental permission to date and its relationship to drug use and suicidal thoughts amongst adolescents. Adolescence. 1982, 17(66), 409-418.

Zaretsky, E. Capitalism, the family and personal life. New York: Harper and Calophon Books, 1976.